



ANNUAL REPORT

by

**Chief Engineer
S. A. LUBETKIN**

to the

**PASSAIC VALLEY
SEWERAGE COMMISSIONERS**

FOR THE YEAR

1971

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January 18, 1972

Passaic Valley Sewerage Commissioners
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Newark, New Jersey

Gentlemen:

I herewith submit my annual report to the Commissioners for the year 1971. It is composed of three parts.

Part I is a series of special reports on various subjects that either have a bearing on the Passaic Valley Sewerage Commissioners' operations and future operations, or that may affect the residents of the Passaic Valley District.

Part II concerns discharges to the Passaic River or any of its tributaries within the Commissioners' Policing Area (from the Great Falls in Paterson to the Mouth of the River at Newark Bay) that were found to be polluting and that were terminated or eliminated during the year 1971. These former violations are, in a sense, a measure of the Commissioners' success in their fight to remove pollution from the lower Passaic River.

Part III concerns polluting discharges that were still violating the law as of the end of 1971, with a summary of how they were detected, together with what has been done to date in the Commissioners' attempts to have them halted. These may be considered a measure of the Commissioners' failures in that they still exist, but in another sense they also indicate a measure of success in that the Commissioners focus the spotlight of publicity on the recalcitrants, so that the powerful force of public opinion can help with abatement attempts.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS



S. A. Lubetkin
Chief Engineer

TABLE OF CONTENTS

PART I - SPECIAL REPORTS

	Page
1. Progress Report on the Commissioners' Pollution Control Program	1
2. Passaic River Assimilation Study and Proposed Treatment Plant at Yantacaw	11
3. Passaic River Basin Plan	14
4. Sludge Disposal	18
5. River Debris	30
6. River Barges	33
7. Fact and Fancy	35
8. Bond Issue	40
9. Recommended Legislation	42
10. Gouverneur Street Sewer Reconstruction	45
11. Overflows in Paterson	46
12. Students Testing Outlets into Passaic River	47
13. Bergen County Planning Board Sewer Report	49
14. Environmental Protection Agency Conference in New York	50
15. Wallington Station and Passaic River Relocation	51
16. Fish Kill in the Passaic River	54
17. Passaic River Flow and Condition	55
18. General Operational Report	57

PART II - POLLUTION VIOLATIONS TO THE PASSAIC RIVER OR ITS
TRIBUTARIES IN THE COMMISSIONERS' DISTRICT AND
THEIR ELIMINATIONS DURING 1971

Adco Chemical Company, Newark	62
Advance Piece Dye Works, Clifton	62
Alden-Leeds, Inc., Newark	63
American Biscuit Company, Passaic	63
American Brand Textile Corporation, Passaic	64
Armour-Dial, Inc., Clifton	64
Armour Industrial Chemical Company, Lodi	64
Artic Ice and Fuel Company, Garfield	65
Ashland Chemical Company, Newark	65
Atlantic Chemical Corporation, Nutley	66
Bayonne Barrel and Drum Company, Newark	67
BASF Corporation, Kearny	68
Belleville, Town of	68
Berle's Carton Company, Paterson	69
Blondel, John and Son, Montclair	69
Braen Company, Samuel, Hawthorne	69
Clifton, City of	70
Como Textile Printers Company, Paterson	72
Crucible Steel Company, Harrison	73
Curtiss-Wright Corporation, Wood-ridge	75
Dale Brook Finishing Company, Ho-ho-kus	76
DeCamp Bus Service, Clifton	77
Diamond-Shamrock, Harrison	77
Eastern Oil Company, Jersey City	78
Edelbock, Mr. & Mrs., Kearny	78
Fairchild-Dumont Electron Tubes, Clifton	80
Fair Lawn, Borough of	83
Fair Lawn Water Pollution Control Facilities	83
Fashion Center, Adcor Realty Corp., Paramus	84
Field's Plastic and Chemicals, Inc., Lodi	85
Fine Organics, Lodi	86
Fisher Scientific Company, Fair Lawn	86
Fluid Chemical Company, Newark	86
Franklin Construction Company, Great Notch	87
Garden State Paper Company, Garfield	88
Glerum Concrete Corporation, Clifton	89
Globe Products, Inc., Clifton	90

Part II - (continued)

Hess Oil Company, Bogota	90
Hoss, J. I. Company, Jersey City	91
Imperial Electro Plating Company, Inc., Lyndhurst	91
Inmont Chemical Corporation, Hawthorne	92
International Paints and Circuits, Inc., Newark	93
Lodi, Borough of	93
Lord and Taylor, Paramus	98
Lyndhurst, Town of	99
Martin's Cities Service Station, Kearny	99
McLean Motor Express Company, Paterson	100
Newark, City of	100
North Arlington, Borough of	100
Northwest Bergen County Sewer Authority, Waldwick	101
Nylok Fastener Division, USM Corporation, Paramus	101
Nutley, Town of	102
Panatomic Engraving Company, Lodi	102
Parra Print, Inc., Passaic	102
Passaic, City of	103
Passaic Valley Water Commissioners, Clifton	103
Penick, S. B. and Company, Lyndhurst	104
Prescott, J. L., Passaic	105
Public Service Electric and Gas Company, Passaic	106
Public Service Electric and Gas Company, Paterson	106
Q Petroleum, Inc., Newark	107
Radel Leather Mfg. Company, Newark	107
Red Star Express Company, Auburn, New York	107
Rheingold Breweries, Orange	107
Ridgewood Pollution Control Plant, Glen Rock	108
Rochelle Park, Town of	108
Royce Chemical Company, East Rutherford	109
Sandoz Colors and Chemicals, Fair Lawn	109
Second River Joint Meeting, Irvington	110
Standard Carlton Hill Properties, East Rutherford	111
Stepan Chemical Company, Maywood	112
Swift and Company, Schickhaus Division, Kearny	114
Ten-Da Brand Food, Inc., South Hackensack	115
Tenneco Chemicals, Inc., Belleville	117
Thomasset Colors, Division of Sterling Drug, Inc., Nwk.	118

Part II - (continued)

Uber Trucking Company, Iselin	119
United Wool Dyeing and Finishing Company, Passaic	119
Westinghouse Electric Company, Belleville	119
Whippany Paper Board Company, Clifton	120
Woburn Chemical Corporation, Kearny	120

PART III - POLLUTION VIOLATIONS TO THE PASSAIC RIVER AND
ITS TRIBUTARIES IN THE COMMISSIONERS' DISTRICT
THAT WERE STILL POLLUTING AS OF THE END OF
1971

Belleville, Town of	121
Clifton, City of	122
Frank's Creek (State of New Jersey)	123
Houdaille Construction Company, Montclair Heights	125
Lyndhurst Yacht Club, Lyndhurst	127
Newark, City of	128
Newark Paraffine Paper Company, Newark	131
Orange, City of	131
Otis Elevator Company, Harrison	132
Podell Industries, Saddle Brook	133
Scheps Cheese Company, Prospect Park	134
Standard Tallow Company, Newark	135

Special Report No. 1

Progress Report on the Commissioners' Pollution Control Program.

The Commissioners have a detailed and extensive program for the next five years. Whether they will be able to maintain a very ambitious time table is beyond their control, as will be explained.

The program has four separate phases that are partially independent and yet combine to make a complete pollution control system. The first phase has to do with the treatment plant. Upgrading the Commissioners' facilities has been in the news but few can appreciate the magnitude of the work and the problems involved.

In 1958, when it was determined that head end facilities were needed (at a then estimated cost of \$8,000,000.) the project was abandoned since the Commissioners had no way of raising that amount of money (no State aid was available and Federal aid was limited to \$250,000. ...if you were lucky). Instead the Commissioners rebuilt the existing facilities, (at a cost of \$650,000.) which temporarily allowed the system to function. It was obvious that as time went on, the flows and treatment required completely outstripped the existing facilities. The flows went from 195 million gallons daily in 1959 to 252 M.G.D. in 1971. The head end facilities were so inadequate that the results were destroying the remainder of the plant.

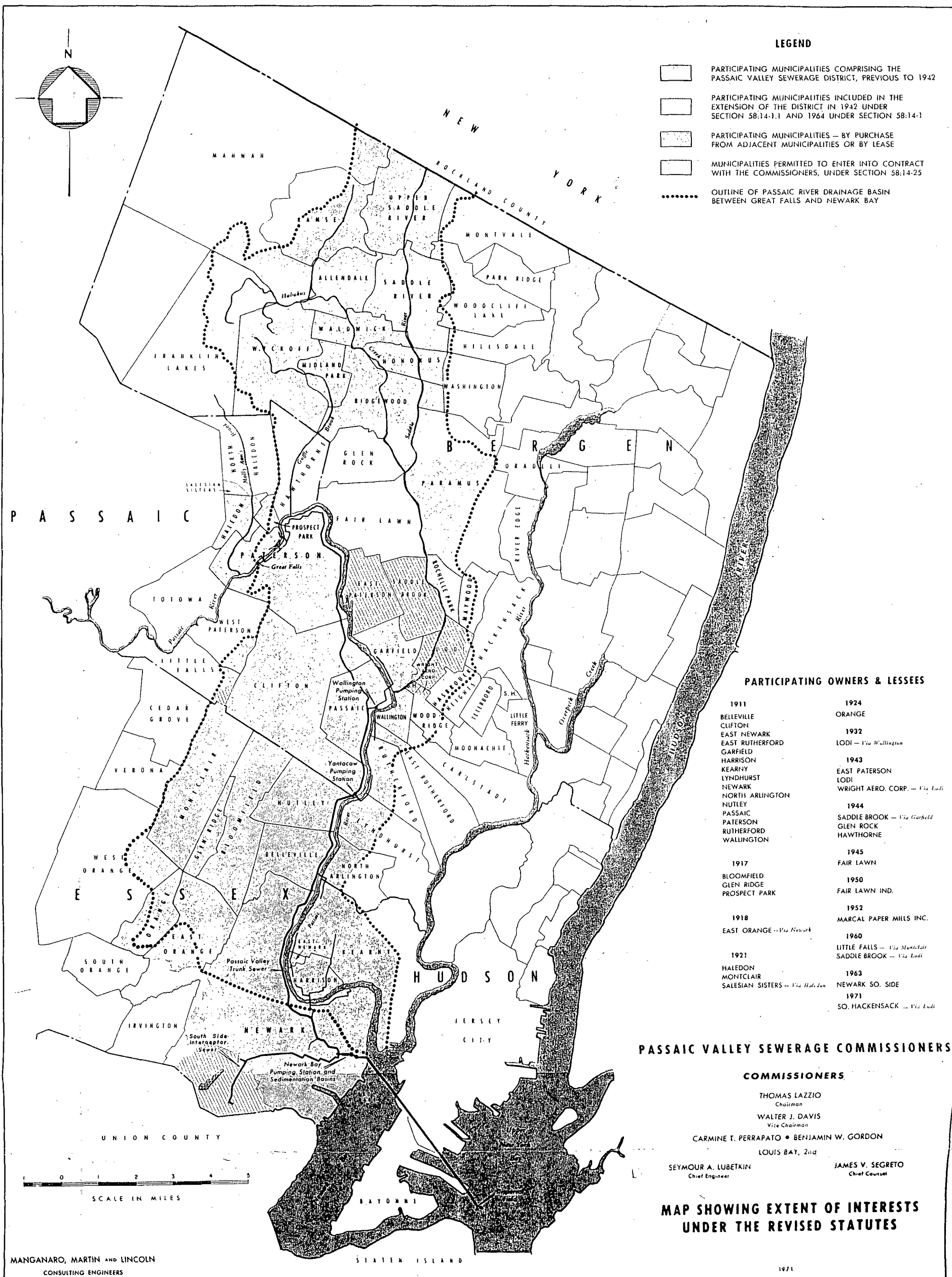
After every rain storm there had to be massive basin repairs due to the destructive effect of grit and rags which could not be stopped during flows of 400 M.G.D. and greater.

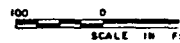
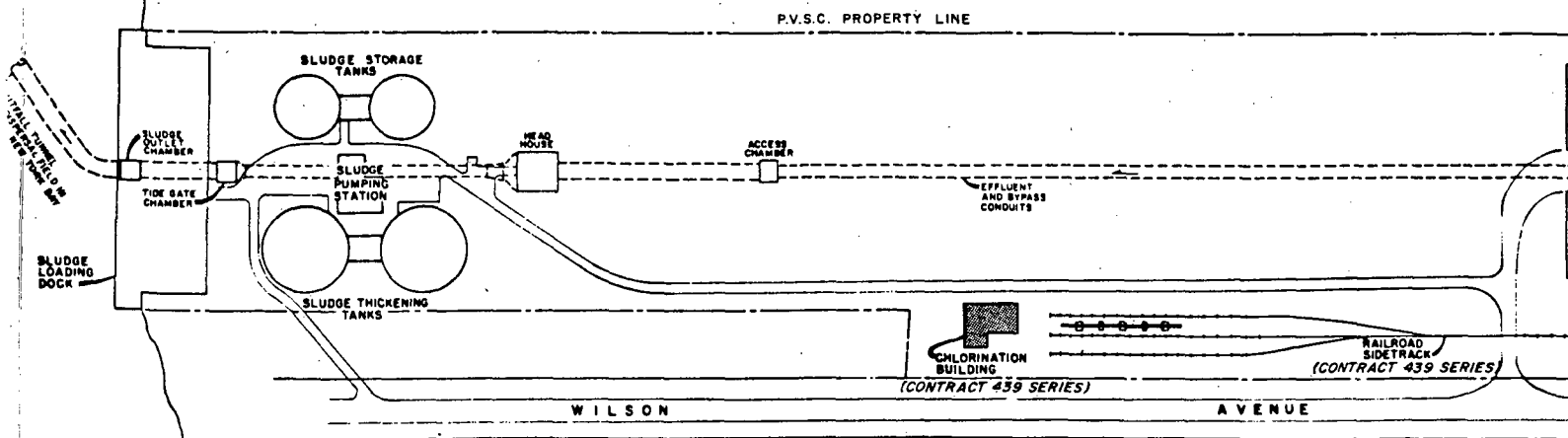
Several times the Commissioners attempted to have legislation introduced which would give them the power to raise the necessary money by bonding to finance these improvements, but it was not until 1969 that this legislation passed and was not until January, 1970, when Governor Cahill signed it into law that the Commissioners were in a position to move on this large project.

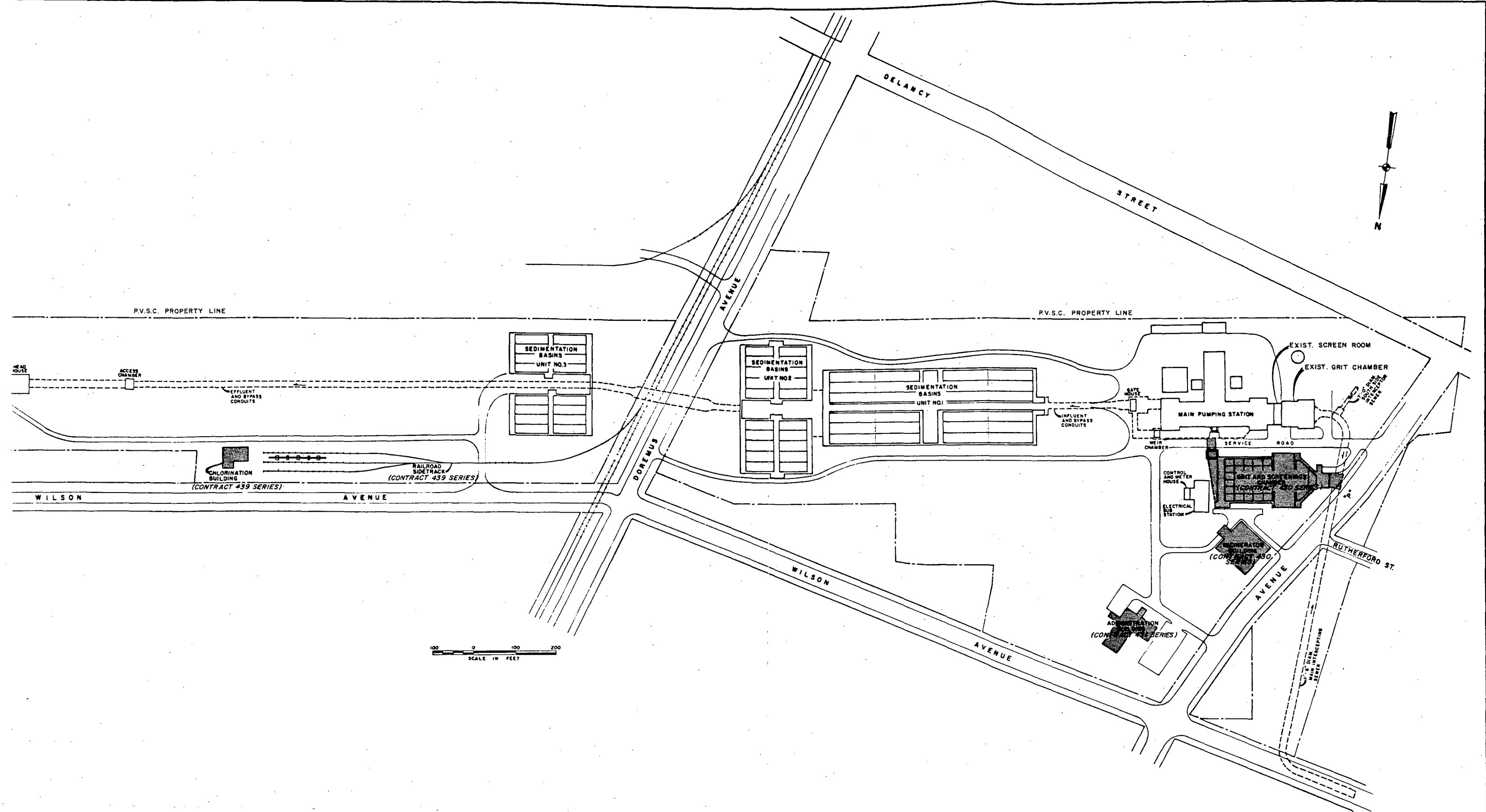
However, anticipating this, the Commissioners had, on June 2, 1969, authorized their consultant to draw the necessary plans and specifications for new head end facilities. These were completed in June 1970, and submitted together with applications for Federal and State Aid to the State Department of Health, on July 8, 1970.

The construction cost at that time, exclusive of engineering, was estimated at \$10,791,000. The head end facilities consist of:

1. A coarse bar rack to remove large material, such as logs baby carriages, etc. to keep them from damaging subsequent equipment. The bar racks have openings of 3" and the material removed will be automatically put through a grinder thence mixed with other screenings.







EXISTING FACILITIES
AND NEW CONSTRUCTION
CONTRACT SERIES 430, 431 AND 439
PASSAIC VALLEY SEWERAGE COMMISSIONERS

N
Y.

Progress Report on the Commissioners' Pollution Control Program -
(Continued) -

2. An aerated oil and grease removal chamber with skimming equipment. It is illegal to discharge oil and grease into the sewers and therefore industries and gas stations have traps on their sewerlines, however, it is a difficult and expensive disposal problem for private parties (including homes) thus the traps are usually not properly cleaned. It is impossible to police this type of discharge continuously and large amounts of oil, grease and scum intermittently reach the Commissioners' facilities. Since this material makes screens difficult to operate and causes other problems in the treatment plant and sludge handling, the Commissioners have decided that the best, most practical and economical method of coping with this problem is to handle the material with proper facilities. Much of the oil, grease and scum will be removed before the screens and incinerated together with the screenings and grit.
3. Six screens. There will be automatically cleaned screens with 7/8 inch openings. The screenings will be macerated, then incinerated.
4. Six grit chambers. There will be automatically cleaned grit chambers of proper length, each capable of handling in excess of 100 M.G.D. efficiently, replacing the three short chambers the Commissioners presently have. The grit will be incinerated before disposal.
5. An incinerator. There will be an incinerator with two furnaces and automatic conveying and feeding equipment to burn the screenings, oil, grease, scum and grit to an innocuous sandy ash. Each seven hearth furnace will be capable of burning 14,300 pounds per hour of the mixture of grit, screenings and grease so that during normal flows, one furnace would operate 24 hours per day and the other would be a stand-by unit. However during exceptionally high load periods both furnaces could be used. The stack gases will be properly scrubbed to remove the pollutants so that all air pollution codes will be met or surpassed.
6. The Control Laboratory and Administration Building will be the heart of the new pollution control center. The new laboratory will contain the latest in analyzing equipment such as Atomic Absorption Spectrograph, Automatic Total Organic Carbon Analyzer etc., so that the Commissioners can trace pollutants such as heavy metals to their sources. Besides pollution control of the Passaic River, the laboratory facilities will be used to control the new plant operations and discharges into the sewer system. The meter control center of this building will be the heart of the automatic river monitoring program discussed later and will also be the center of automatic metering and monitoring of the sewer itself (also discussed later).

Progress Report on the Commissioners' Pollution Control Program -
(Continued) -

The State reviewed the plans of the head end facilities and finally gave their approval on January 7, 1971, (6 months after the application was made), but still the Commissioners could not proceed. The plans were next officially submitted, by the State, to the Federal E.P.A. (actually the Federal personnel had received the plans unofficially from the Commissioners at the same time they were submitted to the State so as to save time by letting them become familiar with the plans). The Commissioners received a conditional Federal approval, dated May 4, 1971, requiring some changes to be made. Most of the changes were incorporated but one of the modifications required massive electrical alterations (at an estimated cost of \$750,000.) which the Commissioners' consultant did not deem necessary. A report dated May 14, 1971, was prepared by Mr. Manganaro, the Commissioners' Consulting Engineer, stating their position and justifying it. At a meeting held in Edison on May 19, the E.P.A. agreed to accept the electric installation as originally submitted.

On May 21, final contract drawings reflecting all modifications were submitted to E.P.A. and final approval was received June 14, 1971.

It is estimated that during the year delay, prices increased approximately 13% to 14% and therefore the Federal and State review time has cost the taxpayers approximately 1.7 to 1.9 million dollars additional on these facilities.

Meanwhile, the Commissioners had set in motion the required actions to permit them to sell bonds so as to finance these head end facilities and the chlorination facilities which were anticipated to be constructed 1971-72.

On May 20, 1971, a Bond Resolution was passed and a Public Hearing was held on July 1, 1971, on the proposed 23.7 Million Dollar Bond Issue. At the hearing the City of Paterson at first objected but withdrew its objections so that there were officially no objections to the issue. Blyth & Company, were chosen as financial advisors, Hawkins, Delafield & Wood, as Bond Counsel and The Fidelity Union Trust Company, was chosen as Trustee.

On June 15, 1971, the Commissioners authorized advertisement to take bids July 27, 1971, on constructing the head end facilities. After receiving approval of bids from the State and Federal Authorities on August 26, the Commissioners awarded contracts on August 27. The total amount of the awards equaled \$14,925,391. Work on the Control Laboratory, Administration Building is to be completed by September 1972, and work on the Grit Chambers, Screens, Incinerator etc. is to be completed in March 1973.

Progress Report on the Commissioners' Pollution Control Program -
(Continued) -

The Commissioners had also agreed, at the request of the State Authorities, to have chlorination facilities installed and in operation by May 15, 1972. The timetable as originally contemplated is as follows:

- | | |
|---|---------------|
| 1.) Completion of Contract Documents | April 1, 1971 |
| 2.) Completion of review by State and Federal Authorities | May 1, 1971 |
| 3.) Receipt of bids | June 1, 1971 |
| 4.) Award of Construction Contracts | June 15, 1971 |
| 5.) Completion of Facilities | May 15, 1972 |

The contract documents on the chlorination facilities had been submitted to the N.J. Dept. of Environmental Protection on March 30, 1971, and although the Commissioners had completed the documents in accordance with the schedule, the amount of time required by the overworked and undermanned State and Federal review section was completely underestimated by everyone. This points up the problem of trying to meet a tight timetable, when you do not have control of every facet of the work.

The Federal Authorities were concerned over the size of the plant and safety because of its size (this of course they knew when the Commissioners were directed to chlorinate their primary effluent instead of waiting until the secondary plant was built). They expressed concern over the possible hazard because of the large quantity of chlorine that would be stored at the site and they stated they had been withholding approval pending further investigation.

At a conference held at Edison, Mr. Lubetkin agreed that a large volume of chlorine was always a potential danger and suggested that possibly the State and Federal Authorities would like to postpone the chlorination until 1976 when, with secondary facilities, the size of the installation would be somewhere between 1/5 and 1/3 what is needed now. It was pointed out that New York City will not be ready to treat and chlorinate the Manhattan discharge until about 1978, if they encountered no delays.

Other alternates were discussed, including the use of sodium hypochlorite. It was pointed out that although liquid chlorine would cost the Commissioners approximately \$2,700.00 per day, the cost of the sodium hypochlorite would be in the neighborhood of \$10,000.00 per day and would pose a tremendous logistic problem, since 16 deliveries of 5,000 gallon trucks per day, seven days per week would be needed. In addition, it would not solve the hazard problem, since the same amount of chlorine would be needed to manufacture the sodium hypochlorite, as is needed in liquid

Progress Report on the Commissioners' Pollution Control Program -
(Continued) -

chlorination. All we would do is to transfer the location of the chlorine storage to a nearby manufacturing plant. It was also pointed out that the Vulcan Material Company, located across the street, a manufacturer of chlorine, stores more chlorine than the Commissioners would.

A discussion of alternate methods of disinfection followed, and when asked, Mr. Lubetkin said that the Commissioners would be glad to test other methods of disinfection but if they did so, it would be impossible to meet the May 15, 1972, deadline for the installation of chlorination facilities. Mr. Lubetkin also stated that, since this type of testing and research program would benefit all others in the field, that a grant from the Federal or State authorities should finance this project. Mr. Lubetkin pointed out that the Commissioners were ready to proceed, and that if any delays are to be encountered because of change in plans or research, it must be made clear that such delays are at the request of the State and Federal Authorities. Other questions were asked such as:
... Could the Commissioners guarantee a supply of chlorine?
... What happens if an airplane crashed into these facilities?
... Were the facilities bullet proof? etc. The Commissioners were requested to submit supplemental reports on many questions along the line of "safety". This conference closed with the statement that the State and Federal groups would meet with their enforcement department and notify the Commissioners of their decision.

Mr. Lubetkin restated that the Commissioners would do whatever is required by State and Federal Authorities and that we would like an approval to go ahead or a request to make any changes the E.P.A. desired, but that time is of the essence, or the Commissioners, through no fault of their own, would not be able to have the chlorination facilities installed by May 15, 1972.

At a subsequent conference held June 21, 1971, the E.P.A. requested a report from an outside expert, recommended by the Chlorine Institute, (but paid for by P.V.S.C.) on these facilities. The Chlorine Institute recommended Dr. Paul E. Burchfield and after his review he submitted a report to the E.P.A., on September 27, 1971, recommending certain additions.

On October 21, 1971, the E.P.A. then approved the plans and specifications subject to the recommendation of Dr. Bruchfield being incorporated into the plans. The Commissioners immediately authorized their consultant to incorporate the changes and also authorized advertisement to receive bids upon completion of the additions (which on the surface appeared to be very minor and inconsequential). Unfortunately Dr. Burchfield had recommended some safety equipment which is used in chlorine manufacturing plants and is not used in chlorination application facilities. When the engineers attempted to size the equipment for our facilities they discovered that equipment was not manufactured small enough and in addition the manufacturers of the chlorination.

Progress Report on the Commissioners' Pollution Control Program -
(Continued) -

application equipment objected to the "back pressure" such equipment would create on their equipment. The result was that we had approval on an "impossible" combination. Mr. Manganaro subsequently made a report as to why this equipment could not be used, (together with a supplemental report from Dr. Birchfield) and finally at the December 29, 1971 Commissioners board meeting, Mr. Manganaro, reported that he had received a verbal "O.K." from the E.P.A. on the chlorination facilities.

The Commissioners authorized advertisement for the receipt of bids subject to the receipt from E.P.A. of a written approval, the advertisement to be on January 7, 1972 and receipt of bids February 15, 1972. (Written approval was received the following Monday).

The rest of the plant is to be upgraded to secondary treatment with a minimum removal of 80% and average removal of 90% of the Biochemical Oxygen Demand. In order to achieve this the Commissioners, at present, have a pilot plant testing program where various methods of treatment are being checked. A laboratory testing program has already ascertained that the waste, as received at the Commissioners' plant, is amenable to biological treatment. The following systems are being tested.

A. - Standard Activated Sludge: This test program is complete. It has been proven that the Commissioners' waste could be treated by this method. The Commissioners have done studies to determine design parameters, sludge volumes and other data necessary for them to proceed. Since this method of treatment is expensive and subject to upset by chemical shocks to the plant, the Commissioners are checking other methods of treatment. The final report on this system should be ready in January 1972.

B. - Bio-Disc System:

This system uses rotating disks to hold the bio-mass that feeds on the sewage. Problems are the deep basins of the Commissioners existing facilities and the delay of the head end facilities for proper rag, grit, and grease removal prior to testing. The Commissioners are going to test a system of combined primary settling and utilization of the Bio-Disc, in the same tank, using the Commissioners existing deep basins. Successful hydraulic bench tests were completed and a report dated May 28, 1971, was submitted to the Commissioners, showing that hydraulically this could be done.

Modification of a section of a basin is now underway and is expected to be completed on April 3, 1972, with a full size demonstration unit when testing will begin. Testing is expected to be completed in March 1973.

Progress Report on the Commissioners' Pollution Control Program -
(Continued) -

In addition, in the same basin modifications, the Commissioners will comparatively test Verti-flow basins, Micro-Floc Settling Tubes, and the use of smaller basin units by further partitioning, thus eliminating troublesome cross collectors.

C. - Unox System:

This system utilizes oxygen instead of air in the activated sludge and is therefore purported to reduce the size of equipment because of the greater efficiency of the oxygen system. A package plant was installed at the end of September and by the end of November results were coming in which showed promise. They show that B.O.D. removals in excess of 80% can be achieved under a steady state condition. Plans are now being made for adjustment in flow to produce diurnal flows which would simulate the actual varying flows of the Commissioners' System.

D. - Flocor System:

This is a plastic media trickling filter pilot plant with two stages of trickling filters. The plant was put on the line at the end of September but troubles occurred due to clogging of the dispersal nozzles with thread like material which had gone thru the primary treatment. A redesign of the nozzles made improvements and as of the end of 1971 the results were much better.

E. - Z - M System:

The Z-M system is a physical chemical system using lime and activated carbon to achieve a "tertiary" treatment. Removals to 97% or more B.O.D. are expected and an effluent close to "drinking water" quality is hoped to be achieved. This package pilot plant arrived on December 8, 1971, but there were troubles putting it "on the line". Since there is no primary plant before the installation and sewage is taken directly from the sewer at the Yantacaw Section of Clifton, problems of rags clogging pumps, etc. have to be worked out. This will be done January 1972. If this plant is successful and the economics justify such an operation, the Commissioners hope that the plant could be located in Clifton with the discharge augmenting river flow to aid the Passaic River in quality.

Progress Report on the Commissioners' Pollution Control Program -
(Continued) -

Sludge disposal will not be neglected. We are informed that ocean disposal will have to be phased out, but we are not told the acceptable alternates. The Commissioners will need guidance from the Federal Authorities in this problem. The Commissioners are committed to do whatever the Federal and State Authorities require, but at this time the E.P.A. is itself undecided. The obvious alternate, incineration, leads to air pollution problems, and other apparent more desirable alternates such as the manufacturing of fertilizer, paper animal fodder, may have other problems. These will be investigated as soon as we know the type of treatment and type of sludge this treatment will produce. However, to accomplish most of this, removal of some items, such as heavy metals, which end up in the sludge will have to be done by pretreatment of some industrial wastes at the source. In order to determine the extent of this, the Commissioners will send questionnaires to the more than 1500 industries in their district to obtain data on which to base both pretreatment requirements and equitable rate criteria. These questionnaires will be sent out early in 1972, but it is not expected that the survey and analysis will be completed before October 1972.

This will coincide with the construction of our new laboratory and control building and the Commissioners will be in a position to verify the questionnaire answers and will then start a program of locating and notifying the industries of pretreatment standards. However, here we again need State or Federal guidelines, not those formulated by political members, but those that are evolved by proper research of scientists. The type of research the nation needs, and should be subsidized, will be to determine specifically what are the limits of the various metals that are harmful to, soils, food etc. We do not know today what limits to set for industrial discharges to our sewers, because we do not know what amount of a metal in a fertilizer is harmful. Neither the State nor Federal Authorities have issued official guidelines to the Commissioners' knowledge. These guidelines will be needed by the Commissioners in approximately nine months to keep our program going on schedule.

The second phase of the Commissioners' Program consists of an additional trunk sewer to take care of the increased flow in the system. At present there is no spare capacity in the interceptor in Paterson and therefore overflows occur at the slightest rain, and sometimes after a rain, when the ground water is high. The volume is not great and the river absorbs this without deleterious effect, but it is unsightly and the trend is definite. The Commissioners have a preliminary report on the new sewer and are awaiting the final report before authorizing the plans and specifications for this sewer. Here they are again running into a State-Federal problem, since the Federal Authorities will not approve a plan that does not conform to an overall basin plan and unfortunately the State has not yet formulated such a Passaic River Basin

Progress Report on the Commissioners' Pollution Control Program -
(Continued) -

plan. Therefore the Commissioners cannot complete a design or construct this sewer at the present time unless State and Federal Authorities will waive this requirement. (There is an indication that this might be done under certain circumstances).

There is, however, a bright note. The Commissioners were informed on September 16, 1971 that Teledyne-Isotopes had been hired to prepare a mathematical model of the tidal portions of the Passaic, Hackensack and Hudson Rivers, Newark Bay, Kill Van Kull and Upper New York Bay. It is expected that this study, a necessary first step in preparing a basin plan, (see Report on Basin Plan page 14), will be completed about September 1972.

Since the discharge of the upstream sewer can follow any one of three alternates:

- 1.) Connect to existing trunk sewer via a pumping station.
- 2.) Connect to the Newark Bay Plant via a force main.
- 3.) Connect to a tertiary treatment plant at Yantacaw, Clifton, thence to the Passaic River.

The Commissioners will need to know the degree of treatment necessary for the possible Yantacaw Plant. The present study should give this information to not only Passaic Valley, but to Bergen County and others for their guidance.

The Commissioners had already been informed by Mr. Segesser, of the N.J. Dept. of Environmental Protection at a conference dated October 14, 1971, that river reaeration to maintain dissolved oxygen above minimum during low flows in the summer in the Belleville-Newark area of the river would not be allowed. (See report on River Assimilation-Pg. 11). Therefore it is possible that a treatment plant at Yantacaw will not be practical. (The river study and the pilot plant results and the final decision of the N.J. State Dept. of E.P. will tell us.)

Phase three of the Commissioners' Program is the installation of automatic monitors in the Passaic River. The results obtained will be telemetered and recorded at the Commissioners' new control center. This will enable the Commissioners to check their section of the Passaic River seven days a week, 24 hours a day to aid in finding intermittent polluters, who undoubtedly exist, that discharge at night under cover of darkness. In addition the flow meters of the Commissioners will also be telemetered to the control building and to a computer, so that accuracy can be constantly checked with sewer levels and flows at the plant. Thus an overflow or break can be detected immediately. We also hope that at that time technology is available to constantly monitor the sewage for detection of heavy metals or any other undesirable items.

Progress Report on the Commissioners' Pollution Control Program -
(Continued) -

The last phase of the Commissioners' program is the treatment of storm overflows. Although it is impractical to eliminate all storm overflows, this material can be treated with a primary treatment and chlorinated so that the effect on the river is drastically reduced. The Commissioners' engineers have presented a proposal from the Sweco Company, relative to a pilot plant for the treatment of this storm overflow of a combined sewer system. The Commissioners had intended to install this at their Second River Yard, but the reconstruction of the Second River Joint Meeting sewer, now scheduled, will make this too difficult. The proposal is presently being reviewed by the P.V.S.C. and their consultant to determine the acceptability of the proposal and a desirable location for testing.

Unfortunately none of the Commissioners' program takes into account debris and boat traffic control but if legislation such as suggested in Special Report # 9, page 42, could be passed, and some debris removed at the Passaic Valley Water Commissioners Plant (See Special Report # 5, page 30), then we could really move, in not only having a river free from water pollution, but from eye pollution as well. When the program outlined is completed, (end of 1976), then the lower end of the Passaic River will have the most modern and effective pollution control program in the world.

SPECIAL REPORT NO. 2
(A Repeat of a March, 1971 Report Updated)

Passaic River Assimilation Study and Proposed Treatment Plant
at Yantacaw.

The Commissioners' consultant has completed an assimilation study of the Passaic River between Dundee Dam and Newark Bay. This study was made to determine the degree of treatment necessary and the effect of a treatment plant located at Yantacaw, on the Passaic River during drought periods. The study indicated that to maintain the dissolved oxygen level above 3 mg/l at all points in the River at low flows (one in ten year drought) an extremely high degree of treatment is necessary.

We have to decide the following:

- (1.) What is desirable?
- (2.) What is acceptable?
- (3.) Can we achieve all what is desirable all of the time?
- (4.) Can we accept what is desirable most of the time and accept a little less a small portion of the time?
- (5.) The economics of the above?

Certainly the treatment plant at Yantacaw is desirable as it would do the Passaic River good to have 100 M.G.D. of crystal clear, antiseptic water discharging into a river that has a flow at 10 year drought times, of only about 25 M.G.D. at that point.

During this dry period the flow is so sluggish that the dissolved oxygen gets low just from natural self-pollution and the added volume would lessen the detention time in the system which could help clear the river of oil drippings from barges and boats, driftwood and sundry items which reach the river. This effluent would help the turbidity of the water and the overall flow characteristics of the water. The only effect our limited study showed of a lesser degree of treatment (80% to 90%), properly chlorinated, as compared to a 97% treatment was that at possibly a short time per year at a small portion of the river, the dissolved oxygen would be lower than called for in the Standards. During most of the time and for most of the river such a plant would be more than adequate from a dissolved oxygen point of view.

Passaic River Assimilation Study and Proposed Treatment Plant
at Yantacaw. (continued)

Several approaches could be taken as follows:

- (1) Raise degree of treatment to raise D.O. for 100% of the time above standards. This may be unduly expensive and impractical.
- (2) Use 80% to 90% treatment and reaerate the river at the points that our model would indicate lower dissolved oxygen, thus returning river to acceptable oxygen levels. This may be practical and Mr. Lubetkin has directed their consultant to study and report on this method.
- (3) Use 80% to 90% treatment realizing that at sometimes at some places the dissolved oxygen may go below standards. This would be a matter of public policy as to what we want to accomplish at what cost. Certainly before an intelligent decision could be made, a detailed study of the river should be made, wherein we program into a mathematical model different flow patterns for a complete year, flow data, representing different types of years (wet, normal, dry) and determine exactly how many days and hours and at what location the oxygen depletion can be expected and what other effects such a treatment plant would have on the river system. Then we can determine if it is worthwhile, for example, to spend \$100 million dollars to take care of dissolved oxygen for seven days in a 10 year period or use other criteria. With this data, discussions could be held with the Department of Environmental Protection and policy could be established.
- (4) A pumping station could be built and this material pumped to the treatment plant at Newark Bay. At present I would prefer one of the other alternatives since the advantages of a source of clear water to the river at the Yantacaw location are, in my opinion, great enough that, even if it is more expensive (within a reasonable degree) and does not have other adverse effects, it should be done.

Passaic River Assimilation Study and Proposed Treatment
Plant at Yantacaw. (continued)

It should be noted that the subject of river reaeration was discussed with the New Jersey State Department of Environmental Protection at a conference on October 14, 1971. At that time Mr. Ernest Segesser, Chief Engineer for the New Jersey State Department of Environmental Protection indicated that the Department would not approve a reaeration plan for the Passaic River as a substitute for a high enough degree of treatment. Mr. Lubetkin pointed out that it was not a substitute for treatment but a method of upgrading river water quality whether or not a treatment plant existed. Mr. Segesser then stated that he did not believe a treatment process existed which would give sufficient treatment, on a reliable basis, for discharge of a large volume of effluent into the Passaic River at Clifton or above. He further indicated, in accordance with this belief, that a Bergen County plan of having a treatment plant near the mouth of Saddle River would not be acceptable.

Mr. Lubetkin stated that he hoped to get sufficient data on a treatment system, and this together with the mathematical study being made by the State will either confirm the State's position or prove the advantages of a plant located in Clifton (together with reaeration) and, if the information collected warranted it, he hoped that the State would reverse its position because of the advantages of a plant in Clifton.

In either case there will be no delay in the Commissioners' program, and data on a physical-chemical process is needed to augment the biological treatment data so as to make the Commissioners' study complete.

SPECIAL REPORT NO. 3
(Reprint of May, 1971 Report Updated)

PASSAIC RIVER BASIN PLAN OR MODEL RIVER PLAN.

To know how to intelligently progress we must have a plan. Whether we build a car or a house or act for the future with a purpose we should have a plan. We must know where to excavate for a cellar, lay the bricks for a foundation, locate doors, windows, rooms, etc., in order to get the building we desire.

The Federal Government recognized this when they required that no pollution control project will be eligible for a Federal Grant, unless the project conformed with a River Basin Plan. They did not want to be supporting and paying for a project that might shortly be obsolete, nor for one that did not fit in with an overall effective pollution control program of the basin.

A good River Basin Plan would show many things. Besides the obvious location of future treatment plants, trunk sewer lines, including sizes and loads, it would show flood control projects, water use (drinking, recreation etc), at various locations, water treatment plants, storm overflow treatment, river realignment, dredging and de-snagging, and both land and river zoning, to control the amount and strength of waste within such limits that can be effectively handled. It would correlate these with the various types of flows, (flood, normal and drought), to the end that at all times the river would be in the condition to be able to service all of the people as it should and as is desired. In short, this is a plan for the Model River. This is the blueprint so that we can know what to do, piecemeal, in order that when we complete our jigsaw, everything we have done will form a unified whole, finishing the picture.

The next question that comes to mind is what can we do to create this blueprint, this Model River or Basin Plan? The first necessary step is to know the river, not intuitively or with verbal descriptions of appearance, but mathematically with numbers. We must know how much flow, at what times, is at all locations. We must know how much natural or uncontrolled pollution exists at all times and at all locations. We must know how much oxygen we can get back from the air (reaeration) at all places at all flows. We must know the temperature patterns, the silting patterns and other patterns at all flows. Then, from all of this information and our working knowledge of hydraulics, biological, chemical and mechanical reactions, we formulate a mathematical model of this river. After putting the mathemati-

Passaic River Basin Plan or Model River Plan (continued)

cal model in a computer, we will check various parameters of known loads and assumed loads, and then recheck with field conditions to see if our mathematical river behaves as our real one does. If there are discrepancies, adjustments in constants and load assumptions are made until we get a mathematical river, which closely resembles the real thing.

Next we check how our river reacts with various pollution loads located along the river with different river flows, and after many, many trials and exhaustive analyses, we learn the amount of pollution load our river can assimilate without going outside standards which we have set. Thus we determine the most efficient location and amounts of these loads, so that we can place treatment plants to disseminate these loads to the river, and we learn how each plant's discharge affects the river even miles away. Then, assuming treatment plant efficiencies, we can determine the total load an area can give to the treatment plant without degrading the stream. These have to be rechecked with various river flows, taking into account the affect of any flood control program, and all other river changes have that may be made for the good of the basin. Armed with this information, we must set up regions for sewer systems and plants. We must now examine the political boundaries to see if these regions are practical, and make the necessary modifications to conform to existing political areas. We then return to our model and see if our modifications are practical from a scientific point of view (are we losing efficiency, etc.) It will be a give and take of the practical and the theoretical, until we find the best overall picture.

Areas must then be zoned to certain pollution loads, and it will be up to each municipality to determine what type of physical population will use this load (e.g. a few of industrial waste producing factories vs. retail establishments vs. homes etc.) The municipalities must then be required to form regional districts in accordance with this basin plan.

There are many more ramifications and refinements than this simple outline presents, but no matter where we end, we must begin by the proper overall river analysis. This first step is extremely complex in data gathering and mathematical reasoning, since the basin covers not only the fresh water upstream of Dundee Dam, and many sub-basins, but the saline tidal lower river, and as I was recently told by the Federal people, the Newark Bay.

Passaic River Basin Plan or Model River Plan(continued)

I am aware that a large amount of data has been gathered over the years, but the step of correlating and formulating this mathematical river has not been done, nor, when asked in Apr. did members of the Department of Environmental Protection Agency know when it would be done. The Department claimed it was extremely short of personnel, and there are many basins in the state in need of such a plan, and since the Passaic River was the most complicated, and not the top priority one, they were reluctant to attack it first.

Now, everything I have explained involves an expensive procedure and is time consuming, and the municipalities that comprise the basin cannot be expected to do this work. Even if they desired, no one has the whole basin responsibility, the resources, and the know-how to efficiently proceed. It would probably take just as long to get the municipalities together to get a proper basin study group (with money), as to actually do the work. Even Commissions, such as the Passaic Valley Water Commissioners or the Passaic Valley Sewerage Commissioners, should not be expected to finance this undertaking. So look at the dilemma the Passaic Valley Sewerage Commissioners and all the other municipalities are in, when they wish to improve the pollution problem in the river. They cannot plan for the future, or they do so at their own risk, since they don't have the over-all objectives before them. If they do have over-all objectives of their own (such as the Passaic Valley Sewerage Commissioners do), they find they cannot proceed with details, except at their own risk. If they wish to construct, when they apply for State and Federal Grants, they will then find that the Federal people require a certification that the project conforms to the River Basin plan-which doesn't exist. If they are not eligible for Federal Grant, they are also not eligible for State Grants (which are tied to Federal Grants). The result is that, with this whole area crying for pollution relief, we are limited as to how far we can go, and although Commissioners' treatment system discharges to New York Bay, there are details on upstream and Newark Bay problems that must be solved to complete the Commissioners' over-all program.

Passaic River Basin Plan or Model River Plan (continued)

I know things are never as simple as presented, but I also know that until we have a complete river analysis, we will not have an effective basin plan, and until we have a basin plan we cannot get off the ground with our physical work, so whatever effort is required, whether it be additional men or outside-consultants, this work should have top priority and be done at once.

Note: On September 14, 1971, the Commissioners were informed that Teledyne Isotopes, Inc. had been hired by the State Department of Environmental Protection to make a mathematical model of the tidal portions of the Passaic, Hackensack, and Hudson Rivers, Newark Bay, Kill Van Kull, and Upper New York Bay, as a first step to the Department's formulating a River Basin Plan. The contract calls for completion of the mathematical model phase in nine months.

Representatives of M. Disko Associates, sub-contractor of Teledyne Isotopes, had a conference with Mr. Lubetkin on November 4, 1971. At this conference Mr. Lubetkin presented them with data on outlets to the river, etc. and promised them cooperation in their endeavors. Mr. Michael Disko promised to submit results of their studies to the Commissioners as soon as they were available, so that the Commissioners can be guided by them in policy making decisions. Mr. Lubetkin confirmed this in a letter to M. Disko Associates dated November 4, 1971, but as of the end of the year had received no reply.

SPECIAL REPORT NO. 4
(Reprint of a June Report, Updated)

SLUDGE DISPOSAL

On June 29, 1971, the Clean Water Council of the N.J. Department of Environmental Protection held a Public Hearing at Monmouth College, West Long Branch, N.J., pertaining to the handling, disposal and total management of sludge waste. Various speakers presented various aspects of the problem with some divergent views. It is easy to see how the general public would be confused, when the various experts are at odds. Generally speaking, scientists were for ocean disposal with some modifications, while representatives of governmental agencies and consulting engineers are divided in their opinions as to what should be done.

The first speaker, Mr. Rocco Ricci, eloquently described the U.S. Department of Environmental Protection's position as to ocean sludge disposal. Briefly stated, they would not help finance any new facilities without a method of sludge handling other than ocean disposal. He also stated that all sludge presently barged to the ocean, not having been digested, must be phased out. He then followed this with a statement that at present it is the Federal policy to phase out all ocean disposal, regardless of digestion. This could put a sewer authority in the embarrassing position of spending large sums of money installing digestion facilities and then finding that these facilities may be useless if ocean disposal is phased out and their ultimate sludge disposal method does not require digestion.

Mr. Robert Wuestefeld of the U.S. Corps of Engineers reported that the interim report of the Sandy Hook Marine Laboratory was misquoted and misunderstood. He expected the final report in shortly and he hoped that would answer some questions. He objected to the proposed 100 miles dumping area and testified that the round trip to a disposal area 100 miles off-shore would take 3 days for a sludge barge. The ramifications of this were not expanded upon at the time, but Mr. Lubetkin subsequently wrote a letter to the Clean Water Council, (copy follows this report), pointing out some problems this would bring.

Mr. Carmine F. Guarino, Deputy Commissioner of the Philadelphia Water Department and Dr. Robert Erb, of the Franklin Institute in Philadelphia, both testified on the benefits of ocean disposal of sludge. Dr. Erb, in particular, remarked that we were continually taking food from the ocean, we should return food, (in the form of sludge), which is properly stabilized. He appeared to favor digestion before disposal which is, to Mr. Lubetkin, a bit of a contradiction. If he desired to feed fish and animal life, it should be in the organic form which can be assimilated by animal life, therefore, since digestion reduces the amount of organics as compared to inorganics, it reduces the amount of "food" available to fish etc. If we were fertilizing the land for plant assimilation we would want to digest, since plants must have their nutrients

in the inorganic form, Mr. Lubetkin pointed this out.

Next Mr. Benjamin Sossewitz, General Superintendent of the Metropolitan Sanitary District, Chicago, spoke on various methods of sludge disposal used in Chicago. Chicago does not have the ocean so they are forced to try other methods and have found the land reclamation by digested sludge as the best to date. However, Mr. Sossewitz, pointed out that the cost of this was \$60.00 per dry ton of which about \$10.00 per dry ton was recovered by the sale of this material, making a net cost of \$50.00 per dry ton. This has to be compared to an estimated \$8.00 to \$9.00 per dry ton of ocean disposal and he questioned whether we, on the ocean, were willing to spend about 6 times what we do now for sludge disposal, particularly in view of the fact that as we go to more advanced treatment we will have more sludge.

Mr. Thomas Glenn, Executive Director of the Interstate Sanitation Commission testified that he felt that we should move the dumping area 100 miles at sea, but he testified that he felt the digestion requirement was not justified and a waste of money, since digestion did not accomplish anything desirable but did have adverse effects, such as returning a nutrient rich supernatant to the treatment plant causing problems in the plant and allowing additional nutrients to reach the New York Harbor Complex.

Time was getting short, so Mr. Lubetkin submitted a written statement for consideration (testifying on only a short part of it). This statement is made part of this special report.

About the only thing almost everyone agreed upon was that they did not know enough and that the heavy metals should be removed at its source.

Other testimony followed, but usually covered the same points.

On July 1, 1971, Mr. Lubetkin wrote the following letter to the Clean Water Council to be included in the record.

Clean Water Council
N.J. Department of Environmental Protection
Division of Water Resources
Box 1390
Trenton, New Jersey 08625

Gentlemen:

I think the discussions were very instructive concerning the relative merits of sludge disposal phase out and short term interim disposal at 100 miles. I remember Mr. Glenn advocating 100 mile disposal "at once", and in this, of course, I disagreed. There was a tremendous time pressure at the hearing, so I did not bring up a point that I feel merits consideration, and am therefore submitting it at this time for the record.

All of the discussions were based on the pro and cons of the desirability of moving the dump area 100 miles, or continuing ocean

disposal at all, but nothing was mentioned about the "nuts and bolts" part of the problem. If we are ordered to proceed with 100 mile dumping immediately, what then? As you recall, Mr. Wuestefeld testified that a round trip would take 3 days. Therefore, to load the barge, allow for provisions, tugs, etc., we must allow 4 days per trip per barge. At present, the barge makes a round trip in 8 hours and we allow a total of one full day for trip, loading, etc. Therefore, theoretically we must have 4 barges for each 1 barge we have now to remove the same amount of sludge, that is if weather is good. Actually we will need from 6 to 8 times as many barges to remove the same amount of sludge because of the weather, as there are less 3 day spans of good weather than 1 day. For example, if, in a given 6 days, the weather is bad 3 alternate days, we could take out 3 barge loads to the present area under the present system, while not one load could go to the new area.

Now, who will supply these barges? Would a contractor build them, (at an estimated cost of well over \$1 million dollars each), without assurance that his capitol investment be returned? And if we talk about phasing out ocean disposal entirely, how could he have the assurance? Are the sewer authorities to subsidize this cost? As I understand it, no ocean dumping facilities are eligible for Federal grants. Even if the sewer authorities paid for barges, they will take about 1 year to build. What about docking facilities? We would have to be able to dock these extra barges, where we only dock one now. There would be a tremendous amount of money spent in docking, loading and storage facilities, of an amount I am not prepared to say, but easily in the multi-million category.

And, with all of the above, how many times do we expect 3 good days of weather, and a sudden change occurs? If this happens when the barge is 1/2 day or one day out, he will have to dump his sludge and run for cover. I predict that we will actually have a trail of sludge from our present point to whatever other point we establish, and I estimate the cost will far exceed the estimated \$1 million per year extra that was stated at the hearing by many times.

I am enclosing extra copies of this letter for the members of the Council.

Very truly yours,

PASSAIC VALLEY SEWERAGE COMMISSIONERS

S. A. Lubetkin,
Chief Engineer

On the following pages is a copy of Mr. Lubetkin's report submitted to the Clean Water Council.

REPORT OF S. A. LUBETKIN, CHIEF ENGINEER OF THE PASSAIC VALLEY SEWERAGE COMMISSIONERS, GIVEN TO THE CLEAN WATER COUNCIL OF THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION ON JUNE 29, 1971 AT MONMOUTH COLLEGE, WEST LONG BRANCH, NEW JERSEY, REGARDING THE QUESTION OF POLICY PERTAINING TO THE HANDLING, DISPOSAL AND TOTAL MANAGEMENT OF SEWERAGE TREATMENT PLANT SLUDGE WASTES.

Sludge handling and disposal has been troublesome for sewage treatment systems since man has attempted to collect his waste and bring it to special plants for what he hoped would be nuisance free, magical disappearance of a problem.

Up to now, economics has been one of the prime considerations determining the method used, since sludge handling often accounts for from 25% to 50% of capital and operating costs, and, with increased sludge from better treatment, this cost may grow to an estimated 60% to 70% of treatment costs by 1980.

As with most of our waste disposal problems, until relatively recently, little was scientifically done researching for a better solution. In coastal areas, disposal at sea was considered satisfactory - out of sight, out of mind was the by-word. I don't mean to imply that we were insensitive to the requirements of our ecology, but rather, with the knowledge and limited discharge of a few years ago, sanitarians believed this was the best method of disposal within their economic reach. I realize that the word "economic" is today considered by many as an unacceptable reason to do anything, but we must accept the fact that it has, in the past, and still does, to a lesser extent, govern what we can do.

In 1924, the Passaic Valley Sewerage Commissioners, along with the City of New York, started to dump sewage sludge into the ocean. Tests were conducted with the Corps of Engineers, and no adverse effects of this dumping were found on the various bathing beaches. The area was chosen and located by the Corps of Engineers who had the authority to monitor discharges into the ocean.

During the period from 1934 to 1938, concern as to whether damage was being done by this disposal method culminated in a series of tests in which the City of New York, the Passaic Valley Sewerage Commissioners, the Elizabeth Joint Meeting, and the Supervisor of the New York Harbor participated. The conclusions reached were put in a report dated June 6, 1938. Generally stated, they

concluded that the waters in the area quickly regained normal conditions after dumping, and did not show signs of gross or persistent pollution. It must be pointed out that the study was not a study in depth, such as subsequent studies started in 1966. At that time, no effort was made to study the benthic deposits and effect of these deposits on the marine ecology.

Now, as I understand it, there are four distinct dumping areas, the sludge dump area, the dredge spoil and cellar dirt area, the acid dump area, and the toxic waste dump area. The last is located approximately 100 miles out to sea, but the other three areas are located within a few miles of each other, with the dredge spoil area located nearest to the New Jersey shore line.

A number of reports have recently been issued by the Federal Authorities concerning the effect of Waste Disposal in the New York Bight. The first, of which I am aware, was dated January, 1968, issued by the Northeast Marine Health Science Lab. Narragansett, Rhode Island, entitled "Preliminary Investigation of Waste Disposal in the New York Bight".

This 33 page report contains much data and many facts, including the following:

(1) They pointed out that without stationary markers indicating the point to begin discharge, that it was easy to visualize discharges short of the designated area, and where shellfish sanitation is concerned, the mile or two discrepancy would be important. They recommended the area be marked. To my knowledge, the area is still not marked as of this date. I would like to inquire as to the reason it is not marked.

(2) They considered anything less than 6 miles from point of discharge of a sewage sludge discharge as possibly not safe from bacterial contamination, and generally speaking, coliform counts of samples taken further from the point of dumping diminished rapidly and were within Public Health requirements. The rapid reduction of coliform indicated by results of their investigation is explained by a combination of dilution with sea water and die-off due to disinfecting power of the sea water.

(3) The material normally settles and accumulates at the bottom, but some of the fine suspended particles remained in suspension for a long period of time; however, they did not define "long period of time".

(4) Sea water samples taken between the sludge dump area and the acid dump area were high in copper (4 times normal) but normal in all other trace metals.

(5) Analyses of clam tissue (Quahog) showed it to be high in copper and manganese, and very high in iron and lead.

In their final recommendation they stated, and I quote, "No relocation of the dump areas could be justifiably recommended from the limited results obtained from the preliminary type of investigation undertaken. The bottom, in the area of the mud, rubble-excavation and sewage sludge dump, is so badly fouled that change of dump location would be of little help to this immediate area. However, consideration must be given to the possibility of these deposits, from long term dumping, drifting into the Hudson Canyon and causing harm to certain marine populations".

Next came the voluminous 263 page report, including tables and charts, entitled "The Effects of Waste Disposal in the New York Bight - Interim Report for January 1, 1970", prepared by the Sandy Hook Marine Laboratory, and actually dated December 3, 1969. This report was probably the cause of the tremendous publicity and the famed exaggerated expression "Dead Sea".

As one reads the report, we realize that statements taken out of context can be misleading. Actually, the report states that the findings are tentative and incomplete and subject to change as the study progresses. The final report was expected to be ready early in 1971.

Recently I contacted Mr. Wuestefeld of the Corps of Engineers, and he told me the final report is now due momentarily. Perhaps it will answer some of our questions we have at present.

Many statements are made in this report that should be considered when attempting to evaluate a solution of this problem. They did state that many questions could not be answered except through a much longer period of study, perhaps up to five years. They also pointed out that the dredge spoil is having an adverse effect on benthic communities equal to or greater than that resulting from sewage sludges, and that these wastes are being dumped much closer to the shore line (Sandy Hook) than are the sewage sludges and industrial wastes. Thus stopping sewage sludge dumping, without altering the dredge spoil dumping pattern, will not solve our problems. There were many statements made to indicate that the heavy metal and oil concentrations in the dredge spoil area

and the heavy metal concentration in the sewage sludge area are in the lethal category and that some areas are effectively devoid of normal benthic life. Oxygen levels at the bottom are frequently below 2 p.p.m. from late July to mid September, and this is insufficient to maintain life in macrofauna. Limited data indicated that any movement of the organic material associated with sludge and dredge spoil was to the east and northeast, away from the Jersey shore, where they deposited in the coarse sand. No time of travel was indicated to tell if this material became innocuous or harmless as it traveled, but they did indicate that when the sludge was deposited, there was about 50% to 70% organics, and as it drifted away from the center, the reduction was to below 10% organics outside an approximate 3 1/2 square mile area. They stated that the studies indicated that the organic matter did not have a fertilizing effect, but rather the opposite, an inhibitory effect was noticed. This was again attributed to the high heavy metal concentrations which may interfere with behavioral and biological responses of many marine animals. There was also found in the dredge area, significant levels of pesticide belonging to the chlorinated hydrocarbon group.

A report by the Scientific Advisory Committee, which met December 17 and 18, 1969, to review the previous report, stated that to properly interpret the data, the assistance of a physical oceanographer was needed, but none was available at Sandy Hook. They pointed out that fish were found in these areas, and there was a high incidence of fin rot disease, which apparently originated in the New York Bight area, but this might be due to a number of things, such as heavy metal, petro-chemicals, etc., and should be studied more. Studies of fin rot disease, its cause, effect, and possible contagiousness should be investigated further and be given a high priority.

However, their opinion was that studies of zooplankton and fishes have limited value to evaluate the disposal operation, since water masses are not static, nor are the animals. Most, if not all, species in the area are seasonal migrants, and the geographic ranges of the species listed are very much greater than the relatively small area affected by the waste disposal.

They concluded that results obtained to date do not show clearly any direct effects of the disposal operation. The dredge spoil area and sewage sludge area are devoid of any normal benthic invertebrate population. At each of the two sites (sludge and spoil) the said absence of normal benthic population appears to be a circular area of about 2 miles which suggests that the portion affected, which this sparcity of macrolife, is about 6 square

miles; however, an additional area is lesser damaged, so that the total area of about 14 square miles for the sludge and 7 square miles for the dredge spoil, has been affected by this operation. They recommended to the Corps of Engineers that the present restricted dumping is the best course. The relationship between rate of disposal and destruction of normal benthic population is not known, and until answers are available, authorization for wide dispersal of sludge and dredge spoils would risk the possibility of destroying the benthic population of an entire area.

Another report, Technical Report #5, "Preliminary Analyses of Urban Wastes in the New York Metropolitan Region" from Stony Brook, New York, dated February 6, 1970, stated that generally sludges consisted of about 55% organics, but were high in heavy metals compared to sedimentary rocks, and that further studies are required to determine the toxic effect, if any, on organisms. They stated that the only effect of digestion on the sludge was to lower the per cent of organics. Metals listed as being present in relatively high quantities are silver, copper, lead, tin, zinc, and chromium.

Finally, a report dated October, 1970, entitled "Analyses of Dredged Wastes, Fly Ash and Waste Chemicals, New York Metropolitan Region" - Technical Report #7, gave a chemical and physical breakdown of sludges and dredge spoils. They concluded that the dredge spoils, which are much greater in volume, are also the major source of oxygen demanding substance, and potentially troublesome metals. The amount of oxidizable carbon discharged as sewage sludge is about two third's that contained in the dredge wastes.

In summarizing these reports, the following conclusions are reached:

- (1) The sludge and dredge dispersal areas have altered the normal benthic life within this area.
- (2) The dredge wastes are potentially more damaging (in both volume and concentration of potentially harmful materials) than the sewage sludge waste.
- (3) It was recommended not to move the dump site without much more study as movement might spread the damage.
- (4) It was recommended that studies of fin rot disease be made at once, and additional studies as to effects of heavy metals and petro-chemicals on the marine ecology also be made.

As to the first conclusion concerning the absence of normal benthic life, there was no statement that there was no life. Actually, an anaerobic life in the sludge exists, which contributes to the self destruction of this material to a more innocuous form. The fact that the normal benthic life was destroyed is to be expected. When we pave a grassy area to make a parking lot, we kill the normal life or grass in that area. In a sense, we have created a "junk yard" in the New York Bight to dispose of our wastes. We did not expect to do this without destroying the normal benthic life in this area. We have many auto junk yards throughout the state that are ugly, that have destroyed the grass and normal life. We dislike them and call them eyesores, but rarely, except if located across the street from our homes, do we call them ecological disasters, and even in our wildest imagination, we do not claim that a junk yard effects the health and welfare of those miles away. I know the analogy is not exact, but the point I am trying to make is that we are emphasizing the wrong item when analyzing the sludge and dredge dump areas. Emphasis should not be on what is happening at the point of dump (which is really obvious) but as to whether it is spreading, and if it has an adverse effect on our beaches and shores. Also, if there is an adverse effect, what in particular is causing this effect and what can we do about it without even greater ecological damage. The reports, unfortunately, do not answer these questions. Perhaps the final report, due shortly, will have more to say on this subject.

It has been stated that the problem of fish fin rot may be due to many things, but only further studies will answer the question.

The problem of heavy metals is a simple one, and yet complex. It is simple in that it is obvious that the vast majority of this material must be removed at the source where each industry, having a waste with heavy metal concentrations exceeding a predetermined amount, must be required to pretreat before their waste gets into the municipal systems, where it is diluted and hard to remove without final deposition in the sludge. It is difficult in the very magnitude of the operation. The numerous industries involved must be contacted and policed. The dredge spoils contain large amounts of heavy metals that have reached the harbor waters throughout the years and have settled to the bottom. It will be many, many years before effective pretreatment will change the character of discharge to the Hudson River complex to the extent that it is reflected in the bottom deposits. Therefore, it is possible, if it is demonstrated that present dumping of the heavy metal is truly having an irreversible adverse affect, that we may be forced to an alternate method of disposal

of the dredge wastes, although at present the data is too incomplete to say.

I believe there is agreement among all, that ocean disposal is to be phased out. The only real problems are "how" and "when", and I am afraid that the "when" depends on the "how", unless there is a critical reason for utmost speed which would make us risk the "how" depending on the "when". I say this, because, as of this moment, we have very few alternate "hows".

The most talked about alternate is the changing of the location of the disposal area to a new area, approximately 100 miles at sea.

Even if moving of the disposal area were scientifically justified, it would serve no purpose, except to raise taxes, for New Jersey to "go it alone". By far the greatest volume of dumping, together with the greatest amount of organics, heavy metals and petro-chemicals, comes from the dredge spoils, and, as I understand it, the Army Corps of Engineers would not be subject to the New Jersey regulations. The second largest total comes from New York, and there again, there is a question concerning control. Therefore, if, after proper scientific analyses, it is deemed best to move the dumping area (which at present I am not prepared to concede), then this must be done at the Federal level, so that all involved are equally controlled.

The problem with doing this at the Federal level is that too often things are done emotionally, rather than scientifically. I realize it is not easy for even a devoted public servant in political life to go against a popular movement, though scientific evidence may point in another direction. It is like trying to stop a moving tank with a bow and arrow. I have discussed this privately with many in the field, and generally the feeling is that the moving of the dump area is inevitable, no matter what is said, so the heck with merits, or even possible ecological repercussions, we must get on the band wagon, or we may get mowed down under the tide of public opinion. Even many who honestly believe the dump area should not be moved, feel that it is best for them to just keep quiet.

What causes the dumping of sludge in this area to be such an unpopular issue? Why, in spite of what some scientists may say, does this type of thing cause such indignation? One reason is because of our natural distaste for sewerage and all it connotes.

The average person shudders at the association. Even after a high degree of treatment and disinfection, if it is announced that the effluent of a treatment plant is pure enough to drink, the common retort is, "for you, not me".

As time goes on, this is a feeling that will have to be changed since, as our population grows, recycling will have to become a way-of-life, and we will not be able to afford the luxury of "intuitive feeling" concerning recycled waste. Actually, Mother Nature was the original, and still is a most efficient treatment plant where all organic material is cycled and recycled. There is nothing we do in a treatment plant that is not done to the wastes in nature when deposited in a body of water; the only difference is one of time. If the time cycle is sufficient before the affects of any organics or bacteria reach the bathing beaches, then the material will be rendered innocuous and not harmful to anyone. This of course excludes the inorganic heavy metals which must be handled separately, as explained previously.

Why I feel that the discharge of sludge to a point 100 miles at sea should be delayed until further information is available, is explained in the book "Web of Life". The author, John H. Stover, points out many cases where a change in one ecological environment may adversely effect things far afield. That all living things have a tenuous relationship to life on earth as a whole. The balance of nature is extremely complex, and when we play with a strand of the web, we may shake the whole structure.

Think of other ecological disasters and near disasters. Did the cattlemen, who overgrazed a lush green pasture in Arizona, realize they were creating a desert of sand and cactus? As to what could happen if we moved the dump area 100 miles, remember we are going to dump in an area harder to control and police, thus I predict the dumping will spread over a much larger area than at present. The sludge will settle slowly and, as a food, may be available to a larger number and variety of sea life, than before. Thus, we may propagate fin rot and other contagious diseases to a greater extent. The fish we eat may have a much higher probability of having eaten from this new area, than from the old one.

A second unknown problem is that noted by several scientists in talks on this matter at Water Pollution Control Federation Conferences, of a "deep freeze" effect. It had been noted that material, such as food, when recovered, after a long period of time from deep sunken vessels, have been remarkably preserved.

Food when recovered in some cases was still edible. Some of our sludge when dumped will reach this deep bottom of the sea beyond the continental shelf. There, if normal digestion ceases or slows, are we possibly creating a "time bomb", which after many years will have formed enough gas (even with slow digestion), whereby this material is refloated and again becomes food for fish, but this time maybe some mutant strain of pathogen that has evolved in the sludge over this period of time, may enter our food cycle causing untold damage? Fantastic, I agree, impossible, I don't know, but until studies show that this type of dumping is better than what we are doing, I for one would not advocate it.

Shortly, I will recommend that the Passaic Valley Sewerage Commissioners introduce legislation requiring industries in our area to fill out and return a questionnaire on the quality and quantity of their wastes discharged into the sewers, which eventually reach the Commissioners' plant. This will be done in connection with Federal requirements on equitable rate studies and pretreatment standards. Using these questionnaires, the Commissioners will require pretreatment of wastes containing heavy metals, to yet to be determined levels, which will have the effect of reducing the metal concentration in our sludge. This is necessary not only for temporary continued ocean dumping, but for the recycling of the sludge which would be our next step. With a sludge low in these toxic materials, we would then be in a position to test different methods of recycling the sludge, such as manufacturing a fertilizer, paper, animal fodder, etc., and if the Federal Government would sponsor, with financial incentives, research in this area, I am sure a good final solution will be found, sooner than most people realize. But until this becomes a reality, do not recommend a temporary solution to replace one that has been used since 1924, which temporary solution is not only expensive, but may take us out of the frying pan into the fire as far as ecological results.

Notes:

1. On November 23, 1971, the N.J. Clean Water Council recommended that sludge dumping be continued in the ocean off Sandy Hook, pending further research on the effects of dumping. Two conditions accompanied the recommendation. They said that if heavy metals were contained in harmful amounts or if public opinion was overwhelmingly against dumping, the sites should be abandoned in favor of sludge disposal beyond the edge of the continental shelf.

2. As of the end of 1971, the final report on "The Effects of Waste Disposal in the New York Bight" had not yet been released.

SPECIAL REPORT NO. 5

RIVER DEBRIS

One of the biggest problems of the Passaic River's appearance is that of debris floating down the river. Regardless of water quality, the eye pollution and navigation hazard of the floating logs, branches, tires, barrels, and whatever does not sink has been of concern to all who wish to improve the Passaic River.

A considerable quantity of this material comes from above the Great Falls, coming into the Passaic Valley Sewerage Commissioners' district and depositing itself on the banks, in areas, where considerable sums of money are spent in bank clean-ups, thus hindering any beautification program. The frustrating part of this matter is that there is a relatively simple solution which could be implemented but which is not, because no one is charged with this responsibility.

Most of the debris, from upstream, is caught on the Passaic Valley Water Commissioners' intake screens at their Little Fall's plant, but instead of it being removed and disposed of, it is sluiced back into the river periodically. Mr. W. Inhoffer, Passaic Valley Water Commissioners' Chief Engineer, has informed me that they have offered, to the State, that they would donate the labor to remove the debris, if the State would supply a crane with a bucket and also a disposal method to handle the material after removed. They believe that since the Passaic Valley Water Commissioners primary function is supplying water and not river clean-up, they should not be burdened with the cost of clean-up equipment, even though they would volunteer the labor. The question that then arises is, "Who is responsible?" We know that the polluters are responsible for pollution and we have responsible agencies to enforce the water pollution aspects of the river, but we could find no agency that would admit that they had the power or responsibility to invest some money for the removal of this rubble. It seems a shame that a solution, so simple in this day and age of expensive and complicated problems, should die on the vine because there is no designated area to get satisfaction.

Possibly the Corps of Engineers could be made interested to supply this equipment, since they are charged with the responsibility of removing it when it reaches the navigable waters below. A job, which they repeatedly say, they are insufficiently manned and funded to do properly. Perhaps \$50,000.

RIVER DEBRIS (continued)

invested here could save them hundreds of thousands annually below. Of course the details on methods of disposal would have to be worked out with the Department of Environmental Protection. This is not a panacea since other debris originates below this point, but it would be a good start.

On June 8, 1971, Mr. Lubetkin received a call from Mr. W. Carpenter, Assistant U. S. Attorney, stating that in a conference on enforcement of the Navigable Waters Act with the Army Corps of Engineers, the problem of driftwood and debris and, in particular, the concern of the Passaic Valley Sewerage Commissioners and the residents of this area was noted. Mr. Lubetkin was told that the U. S. Attorney's office has decided they will take legal action against any owner of property, wherein trash and rubbish are allowed to accumulate, and thus might enter the Passaic River, and also that any derelict barges in the river, where the name and address of the owner is known, can also be dealt with legally.

The Commissioners, therefore, on June 25, requested that each municipality make an inspection of the banks within its area, and if there were any areas showing an accumulation of debris or rubble along the banks, which debris could reach the river, the municipality was requested to make a report to the Commissioners. The report was to include the property designation, the name and address of the owner, and if possible, any evidence showing the pollutional character of the refuse. The Commissioners would then forward this information to the U. S. Attorney's office, and they in turn would take legal action to have the banks cleared. The same applies to any barges, etc., but it was stressed to the Commissioners that the names of the owners of the property or barges are required.

It was pointed out that this was not a bank beautification program, but rather an attempt to halt some debris from reaching the river by cleaning up the source. It was also pointed out that municipalities, through their Board of Health, may force a property owner to remove other refuse, since the refuse often acts as a refuge for rats, and can thus be a public health problem.

In response to the Commissioners' letter of June 25, the Commissioners received the following letters:

July 1 - from W. R. Walters, Clifton Urban Renewal Director, about an accumulation of debris on the property of Mr. Nathan Katler, 630 River Road, Clifton, New Jersey.

July 9 - from Maurice Scott, Clifton Sanitary Inspector, about an accumulation of debris on the property of Dundee Water Power and Land Company, 232 Randolph Avenue, Clifton, New Jersey.

Copies of both letters were sent to the U. S. Attorney with requests for a report from the U. S. Attorney on what action, if any, was being taken on the above complaints.

RIVER DEBRIS (continued)

The Commissioners also received the following letters:

July 21 - from Charles A. Kientz, Jr., Health Officer of the Borough of North Arlington, reporting that their inspection reveals nothing to indicate they are contributing to the pollution of the river, however, there was an accumulation of debris on their banks resulting from tidal action.

July 15 - from Steven Ditzig, Sanitary Inspector of Clifton, about two derelict barges, one located at the Passaic/Clifton boundary line, and the other sunken at the embankment of 580 River Road, Clifton, New Jersey. No owners were named for the above barges, therefore, they did not fall in the category of the debris discussed with the U. S. Attorney.

Having received no reports on the above, Mr. Lubetkin again questioned the U. S. Attorney on July 22, 1971, and was informed that the matters were turned over to the Corps of Engineers for investigation.

Mr. Lubetkin then received a letter dated September 22, 1971, from Mr. Carl R. Woodward II, (Assistant U. S. Attorney), stating that the Corps of Engineers is making an extensive investigation in the Hudson River, but that an effort would be made to include an investigation of the Passaic River as soon as possible. An item which would help them was to receive the location of areas where potential violations occur. They wished the information by lot and block numbers on the tax maps. Although this would take a little time, Mr. Lubetkin instructed the Commissioners' River Inspectors to visit each municipality's tax office and obtain the tax maps of the areas along the river. This has been done, and early in 1972 these maps will be marked with areas of debris and barges and sent to the U. S. Attorney. This will only be the navigable river portion of the Passaic, and will not solve any problems above Dundee Dam.

SPECIAL REPORT NO. 6

BARGES IN THE PASSAIC RIVER

On February 24, 1971, an Assembly hearing concerning the derelict barges in the Passaic River was held at the Lyndhurst Town Hall. Major Robert Lindsay testified that there were ten barges between Belleville and Passaic and that the Corps had contracted with Weeks Stevedoring Company to remove three of these barges. Barge #406, sunken opposite the Commissioners' property in Passaic, was not one of those to be removed. Mr. Alex Komar was named at the hearing as being the person responsible for bringing in many of the barges.

Mr. Lubetkin spoke to Major Lindsay about the Corps removing Barge #406 and a tug sunken next to it, and subsequently wrote to the Corps of Engineers concerning this, but nothing came of this.

The Corps of Engineers did remove three of the barges, but did nothing concerning the remaining seven.

One of the remaining barges belonged to Mr. Edelbock (see violations and Eliminations, page 78). He had been ordered by the court to remove his barge by October 28, but as of the end of 1971, the barge was still there. Mr. Segreto, the Commissioners' Chief Counsel, wrote to Mr. Mischel, the Edelbocks' Counsel on November 24, 1971, informing him of the violation of the court order, but no reply has been received.

The Passaic Valley Sewerage Commissioners had previously attempted to get Casper's Cage to remove the barge located at the Clifton/Passaic boundary line. In court, Mr. Alex Komar admitted he bought the barge from the Erie Railroad, but stated he had sold it to somebody he didn't remember, for an amount of cash that he didn't remember. The court subsequently declared it abandoned and stated that the Commissioners could have it removed. The question of who was to pay for the removal was not resolved. The Commissioners had received a quote of \$30,000. if done by itself, and \$13,000. if done in conjunction with several other barges.

On August 4, 1971, a new law, chapter 281 of the Laws of 1971, became effective in New Jersey. This statute authorizes municipalities to require the owners of any barge which is to be docked in or on the bank of any river within the State for more than 10 consecutive days to post a bond of \$25,000. with the governing body of the municipality within whose jurisdiction it is located. The bond is to be forfeited and to be used in the event the barge sinks or otherwise becomes unable to navigate under its own power.

BARGES IN THE PASSAIC RIVER (continued)

The Commissioners notified the U. S. Attorney on November 16, of this law, so that the U. S. Attorney could request the municipalities to adopt the necessary enabling ordinances to implement the law. The U. S. Attorney, Herbert J. Stern, replied, stating that he felt it would not be appropriate for his office to suggest to the municipalities that they adopt the enabling ordinances.

On December 8, 1971, the Commissioners wrote to each of the municipalities bordering the navigable part of the Passaic River, soliciting their cooperation and urging them to consider adopting the appropriate ordinance so as to control barges that in the future may become derelicts.

SPECIAL REPORT NO. 7
(Reprint of April Report)

Fact and Fancy

Throughout the years the greatest mistake made by the Passaic Valley Sewerage Commissioners was its inability to communicate with the public. Partial truths, innuendo and distortions by some led to complete misconceptions of what was happening. I won't accuse certain people in the Federal Government with deliberate fabrication, but like others, they followed a trend in trying to simplify an extremely complex problem. I once naïvely thought if we did what was right that good would win out, and no attempt was made in the Public Relations field. When it was once mentioned to hire a Public Relation's man to communicate with the news media and improve our "image", the idea was down graded with, "how can you spend public money on anything that would not directly aid in pollution control". Through the years I have sadly learned that it is not what you do, or try to do, that matters to the public, but what someone writes about you, that is all important. I hope to correct some of the common distortions in the following pages.

The Passaic has been named by representatives of the then Federal Water Quality Administration as one of the ten dirtiest rivers in the Country. There have been innumerable editorials, statements and reports concerning this. We hear repeatedly about 147 sewage plants with insufficient treatment and numerous industries discharging into the Passaic, making it a putrid mess. What has given the River its reputation? What are the facts?

The River above the Great Falls, is highly polluted. The 147 inadequate treatment plants and industrial discharges are almost all above the Great Falls and it is that portion of the River that has given the Passaic its reputation. More than once Frank De Hooge and Wendell Inhoffer of the Water Commission have complained of the quality of water coming into their treatment plant. Although the Water Commission is praised for their work in cleansing this water, (and rightly so), nothing is said about the approximately 50,000 gallons per day of sludge they put back into the River which flows into the lower Passaic helping give the River its characteristic brown muddy look. Instead the Passaic Valley Sewerage Commissioners are wrongly accused concerning the quality of water in the lower reaches.

We do not say there is no pollution in the lower end. We issue a monthly report on all pollutions, of which we are aware, that occur in our district. This report tells the status of each pollution and what, if anything, has been done since the last report to abate the pollution. These reports have been issued on a monthly basis for over fifteen years. To my knowledge, no other pollution control agency in the country issues such a report. Armed with these reports, newspapers, public groups and other enforcement agencies could follow the progress or lack thereof of individual polluters and if they intelligently applied their muscle, instead of generally swinging at everyone, they might aid significantly in pollution abatement.

Fact and Fancy - Continued -

The Passaic River is a dirty looking River. There is a large amount of debris, floating barrels and filthy banks. This type of eye pollution is beyond the control of the Passaic Valley Sewerage Commissioners but it should not be ignored and I have suggested legislation which could aid in its control (see Special Report No. 9).

In examining the River for pollution a common method used by people to show conditions worse than they really are, is to use a tug boat and go out of the channel, into the shallow water, where the propellor of the tug will churn up the bottom and make the usually brown river even more muddy. Since every estuary, at its mouth will deposit some organic material even if only natural pollution, this material will usually undergo anaerobic digestion below the surface of the River bottom. It is easy then to have a tug churn deep enough into the River bed to release some of the gas and exclaim how bad it is.

If there are any pollutions of the River, in our district that are not in our monthly report, and they are pointed out to us, we will make an immediate investigation and send a report to the person interested enough to acquaint us with the problem.

Recently orders were issued by the Federal Government which are requiring all industries discharging into navigable water, or any of its tributaries to apply for permits from the Corp of Engineers by July 1, 1971. I have heard many pollution control advocates laud this, saying that now for the first time, we will be able to catalogue these industrial discharges and tell who the polluters are.

The Commissioners have been doing this for years and even though we do not have the authority to require permits, we had catalogued the over 450 outlets into the Passaic River between the Great Falls and Newark Bay. Unfortunately the original copies of this work did not contain the Commissioners' name, thus recently, when we were told by the Department of Environmental Protection of N.J., that they had information on River outlets in our district, a representative was dispatched to Trenton to review it. Yes, you guessed it. It was our own work given to the State, by us, two years previously.

Another problem we have is when we locate a small pollutor. The tendency is to ignore him and go after the giants. Believe me, it is easier and much more rewarding, from the publicity point of view, to proceed against a Crucible Steel or a Tenneco Corp., then a Mr. Edelbock. We are still a country of romanticists that likes the underdog, the David over the Goliath. We still mentally side with the weak, attributing right on the side of an individual fighting the institution. But is this correct? Does not the small pollutor destroy part of our environment? Will the stink

Fact and Fancy - Continued -

caused by the putrification of his defecation, or the possible pathogens put into the water course by his sewage, be less harmful than the small oil drippings of an industry? The answer is that all pollution that can be halted should be halted, so that the stream is in a position to absorb those pollutions, such as storm water overflow, that are presently inevitable, without deleterious effect.

We repeatedly hear, from those who should know better and from many self-proclaimed experts, about Passaic Valley's inadequate treatment hurting the Passaic River. How, if only Passaic Valley would put in secondary treatment, the Passaic River would become practically pollution free.

Unfortunately, nothing could be further from the truth, yet no matter how many times it is repeated that the Commissioners' effluent does not discharge into the Passaic River, this fact seems to be lost, not only on many individuals, but on many news media reporters. They just seem to equate Passaic Valley Primary Treatment with Passaic River Pollution.

The truth is that the Commissioners' discharge their treated effluent (although insufficiently treated, we admit) into New York Bay, and the effect of this discharge on the Passaic River is so small as to not be physically measurable.

Even concerning our discharge to New York Harbor, unfair comparisons are made. Recently Mr. M. Lang, Commissioner of Sewers of New York stated that it seemed silly to have the City of New York chlorinate its Owls Head plant effluent, while not far away the Commissioners were discharging 250 million gallons a day of unchlorinated sewage. Mr. Lang neglected to mention that of the 1.3 billion gallons a day of sewage coming from New York City into the Bay, that 300 M.G.D. from Manhattan is not only unchlorinated, but untreated and unscreened; that every bit of toilet paper, soap bars and dirt flushed down the toilet reached the Bay; that the coliform and pathogens from 8 million people contaminated the Bay. In addition, of this 1.3 billion, another 300 M.G.D. of insufficiently treated sewage reached the Bay from Staten Island and other Boroughs. Mr. Lang knows, as do others, that the Commissioners will be chlorinating their effluent by May 15, 1972, (unless held up by others) and that we will have a modern secondary treatment plant by 1976, yet it seems the fashion to cast a stone at Passaic Valley, and say what you want about Marty, he is in fashion.

The sludge disposal problem seems to be another area where we have a tiger by the tail. We know what we are doing is wrong, and we are so anxious to impress an ecology minded public that we rectify this mistake, that we are afraid to admit we don't know how. Edicts and rules are filtering down from the Federal level

Fact and Fancy - Continued -

and even the State policy is to stop the ocean dumping, but no viable alternate is given. The Federal regulations, at present, require that the sludge be digested before ocean disposal, yet when asked the reason, the answers are nebulous. Sludge digestion creates as many problems as it solves. It will not disinfect the sludge so that pathogens and viruses can still exist. It will not remove the problem of heavy metals, or cigarette filter tips or many other undesirables. The liquid supernatant, returned to the treatment plant for further treatment, contains large amounts of nutrients which reach the water course, giving us another headache. And last, but not least, it is expensive. As opposed to this, the nebulous benefits are a reduction of organic loading of an insufficient amount to alter the course of the "dead" sea.

Alternates given include moving the dumping area 100 miles further out to sea. Dire warnings were sounded about this at the Water Pollution Control Federation Conference in Boston last year by expert oceanographers, concerning the possible consequences of doing this without extensive studies. They pointed out that deep sea disposal has a tendency to preserve what is dumped and natural decomposition is practically halted, thus we might be dumping a "time bomb" which will haunt us later.

Another alternate, and one that most treatment plants seem to be tending to adopt, is incineration of the sludge. The vast magnitude of the volume of material involved makes this a potential air pollution problem. The high percentage of nitrogenous material creates a large amount of nitrous oxide, and even with the most efficient scrubbers a significant amount of this material, together with some particulate matter, will escape into the atmosphere. Also there must be a large volume of Carbon Dioxide, (a natural result of combustion), a material not now considered a pollutant, but its percentage in the atmosphere must be considered in our ecology. At least with the present ocean disposal, our "junk yard" is partially contained, but in the air, dispersion will effect us all.

That does not mean there is no better method of sludge disposal. The apparent best, is making a usable product from it. Fertilizer is the best known example. Other possibilities are the manufacture of paper or animal fodder.

However, the actual putting into practice of any of these must wait until the secondary treatment is installed, since the quality of sludge varies with the treatment, and a procedure which might work with one type of sludge will not necessarily work with another type. Another point is that certain deleterious substances, such as heavy metals, would have to be removed in certain of the solutions. This can best be accomplished by pretreatment of the wastes by industries involved at the source. The Commissioners expect to purchase the necessary equipment for tracing these discharges to the source as soon as their new laboratory is built. Thus, industries in the Commission area can expect to

Fact and Fancy - Continued -

receive pretreatment orders starting at the end of 1972 to remove these heavy metals.

But, in the meantime, let us not go from one undesirable method to another undesirable method, wasting a lot of much needed money and time in the process.:

Another requirement of which we must be careful is that of making industry pay its fair share of treatment and facilities, not only considering the volume of waste but also of strength. Now we all want the industries to pay its way, but in our zeal to accomplish this we must use practical and real parameters that will measure cost of treatment. Parameters in current vogue, such as chlorine demand and B.O.D., may give entirely wrong results and are difficult to measure automatically, while a parameter such as total organic carbon, in conjunction with solids and volume, may give us all we need, and shortly may be able to be recorded automatically. What I am saying is that the theory of fair pay may be correct, but do not legislate details which may foul things up.

SPECIAL REPORT NO. 8BOND ISSUE

On May 20, 1971, the Passaic Valley Sewerage Commissioners held a Public Hearing on a proposed 23.7 Million Dollar Bond Issue. The Issue was to pay for the construction and engineering during construction of the new proposed Head End Facilities and Chlorination Facilities; additional land for new facilities; together with finance and legal costs (including capitalized interest to December, 1974). At the Public Hearing, many municipalities were represented and details concerning the Bond Issue and Head End Facilities were discussed in depth.

On July 22, the City of Paterson sent a formal objection to the proposed Bond Issue to the Commissioners and simultaneously sent copies of the reasons why they thought the Bond Resolution should not be adopted to other large owner municipalities. The Commissioners invited Director of Finance, of the City of Newark, Mr. J. Anthony Jungherr, to the Commissioners' meeting on July 27, to discuss these objections. Mr. Jungherr stated that the Mayor of Newark had convened the Council for a meeting on July 28, and he was going to recommend that the City vote against the Bond Resolution for the following reasons:

- (1) He felt the Reserve Fund should be capitalized.
- (2) He was told there was no control or limitation on the amount of money that could be expended on the project and any Federal or State bid could be used and escalate expenditures, rather than retire bonds.
- (3) There was no provision permitting member municipalities to review progress on the project.
- (4) There was no provision for reduction of project cost by the receipt of Federal Aid.

The Commissioners discussed each item as follows:

(1) Capitalizing the Reserve Fund would have the effect of increasing the total cost of financing to the user municipalities... The Commissioners had considered this and had decided that paying the Reserve Fund out of the "Debt Service" was the preferable method. If the Reserve Fund were capitalized Mr. Tamagni of Blyth & Company, Financial Advisors, estimated that the Bonded Amount would have to increase by \$2.3 million dollars and although payments would be deferred for the first two years the increase in cost the remaining 27 years would not be to the benefit of Passaic Valley Sewerage Commissioners. Actual figures were given to Mr. Jungherr reflecting costs to Newark under both methods of financing.

BOND ISSUE (continued)

(2) Mr. Segreto gave a written legal opinion that cost of the project was limited to the \$23.7 of the Bond Resolution and that this expenditure could not be exceeded by outside additional monies in the project fund (such as Federal & State Grants) except by the adoption of an amendatory Bond Ordinance which would again require a public hearing and give the municipalities a chance to object. Mr. Jungherr requested and received a certified copy of Mr. Segreto's opinion.

(3) The Commissioners passed a resolution (certified copy given to Mr. Jungherr), which said that each periodic construction report submitted to the State of New Jersey, shall also be submitted to each of the member municipalities.

(4) Was really similar to number 2. It was explained that if any Federal or State aid is received, the monies would be placed in the Project Fund until the project was completed. At the end of that time (after completion of project) it would be used to retire bonds unless it was deemed more advantageous to use the surplus money on the next project rather than issue more bonds. If this is decided then a Public Hearing would be held and the owner municipalities could veto this idea at that time. If the idea is vetoed then the surplus would be used to retire bonds.

Mr. Jungherr said the Commissioners had satisfied him on the last three points but that he would have to study the figures on the first point before reaching a conclusion. He invited Commissioners' representatives to address the City Council on July 28, if they wished.

On July 28, Mr. Lubetkin, Mr. Segreto and Mr. Tamagni went to Newark City Hall and met Mr. Mohr and Mr. J. Conn, of the City of Paterson in the anti-room of the Council Chambers. A discussion ensued and Mr. Mohr and Mr. Conn said, in view of the facts now presented that they would recommend the Board of Finance of the City of Paterson rescind their previous resolution objecting to the Passaic Valley Sewerage Commissioners' Bond Resolution.

Mr. Jungherr recommended to the Newark City Council that they support the Bond Resolution, (which was done).

The Board of Finance of the City of Paterson met July 30, 1971 and rescinded its former resolution thus removing its objection to the Bond Issue.

At the end of the legal waiting period, there were no official objections to the Commissioners' Bond Resolution therefore the project is not being delayed by financing.

Special Report No. 9
(Reprint of a March Special Report)

RECOMMENDED LEGISLATION FOR POLLUTION CONTROL OF A STREAM

While testifying at the March 1st public hearing on proposed anti-pollution legislation, Senator Wallwork requested that Mr. Lubetkin submit to him what Mr. Lubetkin thought would be proper legislation which would aid the State and the Commissioners in pollution control. Mr. Lubetkin submitted the following ideas in a letter to Senator Wallwork on March 18, 1971:

(1) There should be a prohibition against the discharge of any liquid waste into any inland waters of the State, where the discharge pipe is below the water level surface. This is important, so that discharges can be properly sampled and monitored. Exceptions can be made, wherein a manhole is provided close to the river edge, so that the policing authority can sample without entering the property of the manufacturing or industrial firm responsible.

(2) Industries or people should be made responsible for ultimate disposal of their industrial waste, oil, etc. Problems we have now include some industries, wherein scavengers are hired to remove oil or other unwanted components. The scavengers, in some cases, may ride several blocks down the street and dump this material into a manhole, causing either pollution or disturbance to the treatment plant. If this is brought to the attention of an industry, it could disclaim responsibility. It is important that no contract should be entered into with scavengers, unless the scavenger has a proper disposal method, and unless the industry is responsible that the scavenger uses this method.

(3) Make it a mandatory fine of \$X per day for all pollutions by persons or industries, even those due to accidental breaks after the first day, to be collectable without long court action. At present, in some cases, when an accident occurs (particularly if it happens late Friday), there may be a delay before repairs are made. With the company considering the economics of working overtime, in many cases the repairs are limited to the normal eight hour day, and no weekend work.

This becomes a very difficult type of legislation to enact, particularly if it is mandatory, since many companies do in fact make a legitimate effort to have repairs done as soon as possible. Possibly, this fine should be optional with the enforcing agency.

A summons should be issuable on certain types of pollution cases, such as a traffic violation summons, having the violator appear before a local magistrate. Fines should be payable to any informer that testifies and aids in conviction, as this will give many people an incentive for aiding in pollution control.

RECOMMENDED LEGISLATION FOR POLLUTION CONTROL OF A STREAM (continued)

(4) Have a fine of \$X for the putting of any solid object, such as old tires, garbage, refuse, or any material which would become an eyesore, into any of the inland waters of the State. Fines should go to any informer that reports and aids in the conviction of any violator. This is important because this is the type of thing that is usually done at night in a surreptitious manner, and is rarely observed by enforcement officials.

(5) Make it someone's responsibility, either the Department of Environmental Protection or the municipality, wherein a stream is flowing, to clean a stream of rubble, old shopping carts, and any other unsightly objects within that municipal border. Allow any citizen or public agency to start an action against the municipality requiring this clean up. Where a stream borders two municipalities, make it the responsibility of each municipality to the center of the stream, unless it is the Department of Environmental Protection that should be responsible.

(6) Require all boats, barges, etc., plying the inland waters of this State, to have completely contained toilet facilities, so as to have no discharge while in the waters. Require them to have pumping facilities to discharge this material into dock facilities for proper disposal when moored.

(7) Require permits to be issued for anyone bringing any barges or boats, exceeding a certain size, into any of the inland streams of the State. Along with the permit should be a bond which would guarantee that this barge or boat would be properly maintained and would not become a derelict or eyesore while within the inland stream. Make it the responsibility of the person or persons bringing said barge or boat into the inland waters for removing said barge or boat, and that all sales of barges or boats within the inland waters must be approved by a proper authority, transferring the permit, bond and responsibility. (See Note)

This type of legislation would be a great step forward towards preventing accumulation of derelicts and hulks in certain of our navigable streams.

(8) Forbid the deposition of any moveable solid material on the river banks, within ten feet of the water edge, wherein this material might easily be discharged by accident or flash flood into the stream. Make it the responsibility of the property owner to clean and maintain the bank within ten feet of the water's edge, even if he is not responsible for the deposition of the material therein.

Also, make municipalities responsible for the same item on street ends and on public property, to the extent that even if an illegal dump is made by person or persons unknown, the municipality or property owner must clean this area within a certain time period.

RECOMMENDED LEGISLATION FOR POLLUTION CONTROL OF A STREAM (con't.)

Note: The New Jersey Legislature recently enacted Chapter 281 of the Laws of 1971 which authorizes municipalities to require the owner of any barge, which is to be docked in or on the bank of any river for more than 10 consecutive days, to post a bond of \$25,000.00 with the governing body, the bond to be forfeited for use in the event the barge sinks or otherwise becomes unable to navigate under its own power.

SPECIAL REPORT NO. 10

GOUVERNEUR STREET SEWER RECONSTRUCTION

The internal reconstruction to the cracked sewer was completed November 21, 1970, after 28 days of pumping sewage around the cracked area to the Treatment Plant.

The Commissioners had applied for Federal and State aid and this project (designated WPC-NJ-297R and 85-S) had been accepted, since eligibility was established, the Commissioners were partially reimbursed.

The State submitted a priority number to the Federal Authorities on October 21, 1970 and in June 1971, the Commissioners received a Federal Grant in the amount of \$738,700. from the Environmental Protection Agency. The Commissioners also received an offer (on January 6, 1972) of a State Grant in the amount of \$663,900. which was accepted on January 10, 1972, making a total of \$1,402,600. on grants on this project.

As of the end of 1971 the Commissioners had expended approximately \$140,300. for engineering and supervision of construction \$9,400. for other expenses, and \$2,497,208. to the contractor. This does not include costs of earlier investigations to determine extent of damage and to investigate alternate methods of rehabilitation.

A final internal inspection is scheduled to be made during February 1972.

SPECIAL REPORT NO. 11PATERSON OVERFLOWS

Three overflow points continue to discharge a small but unsightly amount of sewage to the river during peak hours. The Passaic Valley Sewerage Commissioners intend to clean this section of sewer with a hope that the small additional capacity will aid until the new trunk sewer is built in this area.

Manholes have been enlarged and equipment purchased to aid in cleaning these lines, and work will start in the spring of 1972. We must wait until better weather, since the work can only be done during periods of low flow (nights) as most of the work is in city streets and is therefore too dangerous to do when ice may make driving hazardous.

However, the only real solution is the construction of the parallel trunk sewer to be built (see Report on Commissioners' Program), which we hope to start by 1973.

Special Report No. 12

Students Testing Outlets Into The Passaic River

In September, 1971, Mr. Ted Cassera of Fairfield, N. J., and Mr. Anthony Reitano of Passaic, N. J., both students from Newark College of Engineering, as a school project on water pollution, decided to do work on the lower Passaic River.

They obtained from the Passaic Valley Sewerage Commissioners a book showing locations of outlets discharging into the Passaic River, and they also obtained standards of discharge used by the New Jersey Department of Environmental Protection and the Passaic Valley Sewerage Commissioners.

During October and November they sampled and analyzed the discharge from 45 outlets, of which they felt 24 were suspect.

On December 8, 1971 they presented their findings to Mr. Lubetkin who congratulated them on their initiative, and promised to recheck each of the suspected outlets.

Samples were retaken by the Passaic Valley Sewerage Commissioners' personnel and checked.

Of the 24 suspect, many were pollutions already reported by the Commissioners, such as:

- Newark, Brown Street Storm Sewer
- Newark, Roanoke Avenue Storm Sewer
- Newark, Lockwood Street Storm Sewer
- Newark, Blanchrd Street Storm Sewer
- Newark, Harrison Ditch Storm Sewer
- Vulcan Chemical (not in the Commissioners' district)
- Belleville, 15" storm line under Tenneco.

Others were found to be non-polluting, and possibly the laboratory technique of the students was not quite sophisticated enough. They were invited to the Passaic Valley Sewerage Commissioners' laboratory and shown by Mr. Goldberg how to run C.O.D.'s etc., eliminating the errors induced by salt water and other interfering substances, which had given them false readings.

However, of the 45 samples taken, the students did uncover five pollutions, and although not large in volume, they were definite enough for follow-up by the Passaic Valley Sewerage Commissioners. They are shown in this annual report in detail and are as follows:

- Diamond-Shamrock Chemical Co., Harrison (see page 77)
- Otis Elevator Company, Harrison (see page 132)
- Newark Paraffine Paper Co., Newark (see page 131)
- Parra Print, Inc., Passaic (see page 102)
- American Brand Textile Corp., Passaic (see page 64)

Students Testing Outlets Into the Passaic River (continued)

The Commissioners wish to thank the students for their interest, and can only hope that others will follow their example. A multitude of eyes from the public, watching for pollution, can be a great aid to our common goal. The Commissioners promise to investigate every report of pollution in their district. If anyone has such a report, please call 344-1507 or 622-0190. At night call 344-5310 and a message will be relayed to the River Inspection Department.

Special Report #13
(Reprint of An April Report)

Bergen County Planning Board Sewer Report

On April 19, Mr. S. Lubetkin, Mr. C. Manganaro, and Commissioner C. Perrapato met with Mr. R. Elam, Mr. P. Popoff and Mr. D. Clark of the Bergen County Planning Board in Hackensack.

The report by Elam and Popoff Engineers was discussed.

It was pointed out that part of the route of one of their sewers was the same as the Commissioners' proposed parallel trunk sewer. It was concluded that the Commissioners could proceed and no real conflict would develop. The real problem would occur when the Saddle River trunk sewer was to be constructed.

The Commissioners pointed out that the proposed treatment plant may have to be a high grade tertiary plant, instead of the secondary plant indicated. It was decided that the State Department of Environmental Protection would have to give a Passaic River Basin policy decision as to what could be done.

SPECIAL REPORT NO. 14 (Reprint of An April Report)

Environmental Protection Agency Conference in New York

On April 28, 1971, Mr. Lubetkin, representing the Passaic Valley Sewerage Commissioners, attended a conference called by the Environmental Protection Administration of New York City. The purpose of the conference was to pool information and coordinate efforts against polluters in the New York Harbor - Newark Bay - Lower Passaic River Area. Mr. Lubetkin suggested a committee to study and make recommendations on the sludge disposal problem. At first this was greeted with enthusiasm but when the complexity of the problem was realized, this was postponed. Committees were set up on pollution enforcement coordination. These were divided into three geographical areas, New York City, Hudson River Valley, and Northern New Jersey.

The goal of the committee was to gather an inventory of potential industrial polluters, review enforcement status against these, and recommend future enforcement procedures.

Those who attended this conference were:

Federal:

Kenneth Walker, Acting Director, Region II, E.P.A.
 Dr. Arthur Merrill, Nat'l Oceanic Atmospheric Admin., Commerce Dept.
 Gerald Hansler, Interim Regional Coordinator, E.P.A.
 Major R. S. Lindsay, Army Corps of Engineers
 Comdr. R. J. Hansen and Capt. G.H. Weller, 3rd Coast Guard District
 Whitney N. Seymour, U. S. Attorney, Southern District, N. Y.
 R. A. Morse, Ass't. U. S. Attorney, Eastern District, N. Y.
 Garrett E. Brown, Ass't. U. S. Attorney, New Jersey District

Interstate:

Thomas Glenn, Interstate Sanitation Commission

State and Regional:

George Humphreys, Dept. of Environmental Conservation, N.Y. State
 Charles M. Pike, N. J. State Dept. of Environmental Protection
 Philip Weinberg, Ass't. Attorney General, New York State
 Stephen Gordon, Ass't. Attorney General, State of New Jersey
 S. A. Lubetkin, Chief Engineer, P.V.S.C.

City of New York:

Mayor John V. Lindsay, New York City
 Jerome Kretchmer, Environmental Protection Administrator, N.Y.C.
 Maurice M. Feldman, Commr., Dept. of Water Resources, N.Y.C.
 Martin J. Lang, Director, Bureau of Water Pollution Control, N.Y.C.
 John deZuane, Department of Health, New York City
 Thomas J. Rush, Jr., Deputy Chief, Fire Dept., N.Y.C.
 Alexander Gigante, Jr., Ass't. Corporation Counsel, N.Y.C.
 Dr. Alan Johnson, Mayor's Oceanographic Advisory Commission
 Capt. John P. Lowe, Police Department

Note: As far as I know, there have been no committee reports as of the end of 1971. nor do I know if any committee has met

SPECIAL REPORT NO. 15WALLINGTON STATION & PASSAIC RIVER RELOCATION

The Department of Transportation has relocated a section of the Passaic River between Wallington and Passaic in order to extend Route 21 Freeway. The river was relocated to the opposite side of the Commissioners' Wallington Pumping Station leaving the station on an "island" bounded on the east by the Passaic River and on the west by Route 21 Freeway. The Pumping Station now has the river siphon on the suction side of the pump instead of the discharge side. The river relocation and highway construction has given the Commissioners several problems as follows:

Problem 1: During the design period the Commissioners were notified that some of the Commissioners' land adjacent to the station would be required for highway use. The Commissioners requested other land as a trade since Commissioners' personnel and maintenance trucks would need parking and in addition needed access to new Manholes, etc. Department of Transportation agreed to this at a conference in Trenton and partially confirmed in a letter to Mr. Lubetkin, dated September 25, 1969. However, the Department of Transportation did not execute an actual transfer of land. Although the Commissioners tried to consummate the transaction several times, and although there appeared to be a meeting of the minds, for some reason the matter could not be settled with the Department of Transportation.

On January 21, 1971, without any discussion with the Commissioners the Department of Transportation started an action to take the land it stated it needed and an Order to Show Cause was issued on February 8, 1971, which was to be heard on April 23.

Meanwhile, Mr. Segreto, Commissioners' Chief Counsel, had written to Mr. M. Millichap on February 5, 1971, explaining that the Commissioners needed an exchange of land and without the exchange of land, the Commissioners would be damaged and he hoped the matter could be amicably settled.

Mr. Segreto met with Mr. Millichap on March 17 (confirmed in a letter of March 18, 1971), wherein the Commissioners' position was again explained that all the Commissioners desire was an exchange of land so as to have parking facilities for their Maintenance and Personnel's vehicles. It was mutually agreed to request an adjournment in the Department's action.

In April, Mr. Segreto and Mr. Lubetkin met with Mr. Mariorino

(confirmed in a letter dated May 6, 1971) wherein there again appeared to be an agreement concerning an exchange of land and an understanding that the application for an appointment of Commission shall be adjourned from time to time.

Mr. R. Andrejak of the Department of Transportation wrote to Mr. Lubetkin on June 10, 1971, wherein he stated that there is land presently being considered for exchange as requested by the Passaic Valley Sewerage Commissioners and the Commission would be advised as to progress in the matter.

To make a long story short, there were more letters and conferences and everybody seemed to be saying yes, but nothing seemed to be done and meanwhile notices keep coming on appointing a Commission for condemnation.

Problem 2: The location of the new inlet siphon chamber is too close to a house in Wallington and any odors carried along by the sewage is released at this point where the sewage enters the siphon. Mr. Lubetkin requested a larger area but this was denied by the Department of Transportation. At a conference held October 21, 1971, at the Commissioners' office, Mr. Segreto pointed out that this was a nuisance created by the River Relocation and it was the responsibility of the Department of Transportation to pay for its abatement. The Commissioners' consultant was requested to design a system to ventilate and properly dispose of any odorous gases which might emanate from this chamber.

Problem 3: There were numerous construction problems with the contractor. On October 21, 1971, a conference was held with representatives of the Department of Transportation on these matters, which are enumerated as follows:

- A) The poured concrete junction section of the 54 inch manhole (Station W28+49) was poorly finished having rough and irregular surfaces with projections into the 54 inch area. Material catches onto these projections, causing blockages.
- B) Pipe ends were protruding into the manhole (Station W24+90) and had to be cut off flush as it interfered with flow.
- C) Manholes and castings on both sides of river of force main clean-outs are undersized.
- D) The Inlet siphon chamber is incorrectly constructed with covers uneven and not set properly. The stop plank guides are incorrectly located which will make cleaning extremely difficult. The bottom of the stop plank guides in front of the 48" siphon was clogged.

SPECIAL REPORT NO. 15WALLINGTON STATION & PASSAIC RIVER RELOCATION (continued)

with concrete making it impossible to correctly set the stop planks. The Commissioners also requested a depressed curb for access to maintenance area and easements and paving in area are needed. Also, an access gate in the fence to the overflow gate valve is needed.

- E) The siphon itself has a considerable amount of material which went in during construction when rain washed dirt and stones into chamber through side opening and from boulders that were thrown in before a cover was placed over the chamber opening.
- F) The 36" Sanitary Sewer in Van Winkle Street has a hump in the sewer due to mis alignment. The Commissioners also requested a easement on this land for the sewer.
- G) The 54" Junction Chamber and line leading into the Wallington Station had missing steps, leaks, a hole in the chamber wall, unmortared pipe handling holes and form ties sticking out of walls. There was a large leak in the first joint downstream from the chamber and heavy deposits of broken concrete and debris in the invert of the sewer going to the station.
- H) Miscellaneous items such as sewer easement, fence relocation, paved parking areas, fire hydrant, gates in fence, damage to Passaic Valley Sewerage Commissioners' personnel's vehicles were also discussed.

At the conclusion of the conference, representatives of the Department of Transportation stated that most of the items can be handled at the field level and if problems occurred then they would be rediscussed. The problem of the land would be forwarded to other departments. As of the end of 1971, most of the problems are still unsolved.

Problem 4: During the river relocation there was considerable river pollution from sewer breaks in Passaic by the contractor and from turbidity and oxygen depletion, because of dredging and re-deposition of bottom soil.

Another question that is now asked, " Is the Wallington Pumping Station now located in Passaic?" I am told that this is a question, the State Legislature will have to answer.

SPECIAL REPORT NO. 16

FISH KILL IN THE PASSAIC RIVER

During the weekend of January 9-10, 1971, a group of boys, using bow and broadhead arrows (the type designed for big game hunting), killed about 100 large carp. The carp had been trapped in a shallow pool created as the tide receded.

The boys let the bodies of the fish lie on the Passaic River Bank on Clifton near the Ackerman Avenue Bridge, but fortunately, the fish kill attracted a large number of gulls so that deteriorating fish on the banks was minimal.

This was not the first occurrence of this type, and Clifton Police Chief, Joseph A. Nee ordered a crackdown on the use of these dangerous arrows in the City.

SPECIAL REPORT NO. 17

THE PASSAIC RIVER - 1971

During 1971 the flow in the Passaic River averaged 1462 cubic feet per second, as reported by the U.S. Geological Survey at Little Falls in New Jersey, as compared to 872 C.F.S. for 1970. The breakdown by month is as follows:

<u>Month</u>	<u>1970 Flow (C.F.S.)</u>	<u>1971 Flow (C.F.S.)</u>
January	462	540
February	2951	2039
March	950	3222
April	2702	1368
May	559	862
June	307	392
July	155	208
August	208	1289
September	106	3572
October	281	960
November	1188	1397
December	595	1694

As can be deduced from the above, there were floods in February, and March and we had the large floods of August and September.

During the early part of the year, (Jan. Feb. March and early April), the dissolved oxygen in the river was excellent and the river was in good condition except for intermittent spots of oil at certain points due to accidents and a tremendous amount of debris coming down from upstream.

Toward the end of May the oxygen sag at the lower end of the river showed itself, (there seem to be little or no progress in controlling the pollutions from the Newark Storm Sewers).

June was one of the most frustrating months for the Commissioners, as far as river pollution was concerned. There were many breaks and accidents and, combined with river relocation in Wallington, overflow of Paterson sewage after the mid-month rain,, and the pollution of the Newark storm sewers, caused the lower part of the river to be low in quality during the month.

With the dry July, again the lower part of the river (Newark area), was not satisfactory, but the rains in August purged the river and then some. The floods caused tremendous damage including breaks in the Second River Joint Meeting Sewer, where a 400 foot section had to be replaced, but not until large volumes of sewage, (approximately 40 million gallons per day from August 28 to September 3), was discharged to the river. Treatment plants (Fair Lawn) and pumping stations (Lodi) were flooded, also contributing to the pollution.

THE PASSAIC RIVER - 1971 - (Continued) -

Hurricane Doria was followed shortly afterwards by the rain of September 6, (1.16") and the storms of more than 8 inches that fell between September 11 and 14, causing floods and heavy damage again. High water in the Passaic during the remainder of the year kept the quality high and the dissolved oxygen was satisfactory despite the Newark pollution.

During the year more than 80 pollution violations were corrected but 17 (including six from Newark), were still discharging as of the end of the year.

Generally speaking, I feel we are moving in the right direction as far as water quality is concerned but not as far as appearance. Little seems to be done about cleaning up banks, debris etc. and it can only be hoped that 1972 will bring a change in this attitude.

SPECIAL REPORT NO. 18

GENERAL OPERATIONAL REPORT

During the year 1971, the Passaic Valley Sewerage Commissioners pumped and gave primary treatment to 92,036.28 million gallons of 252.15 million gallons per day of sewage at a cost of \$50.81 per million gallon. The breakdown of this cost is as follows:

PENSION PLAN		\$3.147
ADMINISTRATION		
Salaries	\$3.071 per M.G.]	\$6.613
Expenses	\$3.542 per M.G.]	
LINE MAINTENANCE		
Salaries	\$3.857 per M.G.]	
Expenses	\$0.998 per M.G.]	\$4.855
RIVER INSPECTION AND SANITATION CONTROL		
Salaries	\$2.326 per M.G.]	\$2.450
Expenses	\$0.124 per M.G.]	
PUMPING OPERATION - MAIN STATION		
Salaries	\$3.075 per M.G.]	
Expenses	\$2.488 per M.G.]	\$5.563
TREATMENT OPERATION - MAIN STATION		
Salaries	\$3.358 per M.G.]	
Expenses	\$4.843 per M.G.]	\$8.201
MAINTENANCE OPERATION - MAIN STATION		
Salaries	\$4.270 per M.G.]	\$4.816
Expenses	\$0.546 per M.G.]	
YANTACAW PUMPING STATION		
Salaries	\$1.150 per M.G.]	
Expenses	\$0.108 per M.G.]	\$1.258
WALLINGTON PUMPING STATION		
Salaries	\$1.189 per M.G.]	\$1.411
Expenses	\$0.222 per M.G.]	
BOND DEBT SERVICE		\$6.497
RESERVE FOR REPAIRS, REPLACEMENTS AND IMPROVEMENTS		\$7.820
	TOTAL	\$52.631
CREDITS (Insurance claims, tax refunds investments, etc.)		- 1.817
	NET	\$50.814

GENERAL OPERATIONAL REPORT - (continued) -

At the Newark Bay Pumping Station and Treatment Plant, under the direction of Superintendent of Plants, T. Perry, Plant Engineer, A. Rasche, Assistant Plant Engineer, P. Walker, and Superintendent of Construction and Maintenance, C. Daly, 15,636,600 kw-hrs. of electric power were used at a cost of approximately 1.29¢ per kw-hr. In addition, 336,984 gallons of #2 diesel fuel oil were used at an average cost of 12.21¢ per gallon.

It is estimated that 77,080 million gallons were pumped with electric power, and 14,950 million gallons with diesel power. Flow peaks were as follows:

Peak instantaneous flow rate: 516 M.G.D. at 4:40 A.M. 8/28/71
 Peak rate of flow for one hour: 512 M.G.D. from 2 to 3 P.M. 8/27/71
 Peak flow for one day: 467.32 M.G. from 9 A.M. 8/27/71 to 8/28/71
 Peak flow for one week: 304.72 M.G.D., 9 A.M. 8/23/71 to 9 A.M. 8/30/71

The Commissioners barged 516,370.14 wet tons of sludge to sea (at an approximate average solids content of 8% to 10%) during the year under the direction of Superintendent of Dock and Basins, M. Andolino, Jr. 2996.50 cubic yards of screening and 13,270 cubic yards of grit were removed at the Newark Bay Plant and an additional 1588 cubic yards of screenings and grit were removed from line screens and chambers during the year.

As in the past several years after each major storm, there was considerable difficulty with the basins. Grit and rags that went through the inadequate screen and grit chambers overloaded the basins to the point of massive breakdowns. In particular, during February, two heavy rains in May and then the disastrous storms of August and September topped off by heavy rains on October 10, 11, 24 and November 2, caused the Commissioners problems. P.V.S.C. personnel worked hard to return the basins to normal after each storm but the real key is the need for the additional screens and grit chambers that will be supplied with the new head end facilities now under construction.

This year was the kick-off year of actual construction of these long awaited facilities. Plans and specifications for them had been completed and submitted to the State Department of Environmental Protection and Federal Environmental Protection Agency on July 8, 1970. Finally, one year later, on June 14, 1971, approval was received and the work was advertised on June 18, 1971. Bids were received on July 27, 1971, and the major portion of the work was awarded on August 27, 1971. It is expected these facilities will be completed in March 1973. Unfortunately due to the delay it will be a race to the completion of these facilities and a breakdown of the overloaded existing facilities.

After the initial problems with review time with the State and Federal Authorities, conferences were held with a view of getting better liaison among all three, (P.V.S.C., E.P.A. and Dept. of E.P.). A coordinating committee was formed and meets regularly to discuss current problems and what appears to be problems in the making and I wish to report

GENERAL OPERATIONAL REPORT - (Continued) -

that as of the end of the year there appears to be a better mutual understanding of the problems involved and we do not anticipate the types and length of delay on the remaining projects as we had on the Head End Facilities and the Chlorination facilities.

During November and December the Commissioners experienced a series of breakdowns of equipment, including screens, diesel engines and basins. As of the end of the year the screens were repaired, the diesels were made operable until the receipt of some new parts and the men are still working to repair some of the basins.

At the Commissioners' Wallington Station, under the direction of J. Manney, 4092.22 million gallons were pumped or an average of 11.07 M.G.D. with a consumption of 588,150 kw-hrs. of electricity at a cost of 2.06¢ per kw-hr. This station pumps sewage from Wallington, E. Rutherford and parts of Garfield, Saddle Brook, Passaic and Rutherford.

During 1971, the New Jersey State Department of Transportation was still in the process of relocating the Passaic River around the pumping station for the purpose of extending Route 21 Freeway. This necessitated relocation of sewer lines and building a new river siphon, and in general the whole area is still a "mess" around the Wallington Station, due to this reconstruction.

The Yantacaw Station, under the direction of P. Melillo, pumped 1325.31 M.G. or an average flow of 3.63 M.G.D., with a consumption of 227,700 kw-hr. of electricity at a cost of 2.54¢ per hr. The Yantacaw Pumping Station pumps sewage from Lyndhurst and part of Rutherford.

The Commissioners' Department of Sanitation Control, under the direction of Director of Sanitation Control, A. Goldberg, Superintendent of River Inspection L. Cuccinello, and Chemist, E. Rys, took and analyzed approximately 4,300 samples from the Passaic River and its tributaries and from various discharges into the Passaic River and its tributaries within the Commissioners' district. Approximately 29,000 separate tests were made on these various samples during the year. Also approximately 1500 samples and 7500 tests were run on the pilot plant operations. In addition to standard tests such as C.O.D., B.O.D., pH, total solids (mineral and volatile), suspended solids (mineral and volatile), B. Coliform, Chlorine residual, dissolved oxygen, odor. Other tests such as chlorine demand, chromate chromium, soluble ether extracts (oil), E. Coliform, total bacteria count, iron, acidity or alkalinity, cyanide, volatility and flammability, distillation fragments, nickel, zinc, manganese, copper, identification of fats and oils, and microscopic, physical examinations were made where special situations called for them.

GENERAL OPERATIONAL REPORT - (Continued) -

93 pollution violations from 80 separate violators were eliminated during 1971 due to the work of this department. In addition, the members of the Sanitation Control Department are constantly surveying industries in the area and keeping tract of outlets into the Passaic River and its tributaries, in order to keep its records up to date.

The Meter Department, working under instruction from Engineer's Assistant, R. Ready, takes readings from approximately 70 different flow and water level meters, some daily, most weekly. The old meters are constantly maintained, and slowly are being modernized with a view of computerizing the flow meters, correlating them to water level meters with an alarm system when the two types do not check, showing a mal-function or a problem in the trunk line.

The Line Maintenance Crew, under the direction of General Superintendent, M. Andolino, Sr. (now retired), Superintendent of Line, J. Ferrara, and Assistant Superintendent of Line, J. Kearney, keeps constant check of the line, cleaning screens, grit chambers, weir chambers, repairing manholes, and cleaning sewers.

I am ably aided in the thousand and one engineering details in the plant, on the line, and in the office, by Deputy Engineer E. Moller, and Assistant Engineer, J. Lawrence.

At this point I would like to commend several Passaic Valley supervisory personnel for the long extra hours they put in during the year attending to their duties. I cannot say for work beyond the call of duty, because being a Passaic Valley supervisor requires, many times extra hours of work. Yet remembering that these men do not get paid additional or for overtime, it does take some dedication to do what they did.

Ed Moller, Deputy Engineer, accompanied many times by John Lawrence, Assistant Engineer worked many weekends and nights when the flow was low on sewer connections, internal sewer inspections and in particular work on the sewer relocation at Wallington Pumping Station. They worked each Holiday weekend, (unless rain interfered), so as to get long periods of low flow. Connie Daly, Superintendent of Construction and Maintenance, for his weekend and early morning work on tide gate repairs and weekend work on the Basins. Alex Goldberg and Ed Rys for coming in weekend after weekend to finish work which our overloaded laboratory was not able to complete in the five day week particularly with the pilot plant study samples. Tom Perry, Al Rasche and in particular Peter Walker for the number of weekends and nights they worked on a breakdown of a screen or basin. It was rare that a week went by that Pete did not receive calls at home,

GENERAL OPERATIONAL REPORT - (Continued) -

(usually 2 A.M.), from the operating engineer on problems that usually a word of advice from him, solved. Bud James for the times he came in when an electrical failure occurred. M. Andolino, Jr., for the times he had to come down and check a sludge loading during weekends and for taking calls to his home from the sludge pumping station operators at all hours of the night. To Jim Kearney for his night work and weekends during rainstorms and floods locating sources of trouble and usually helping Ed Moller on line work. Then there was Lou Cuccinello, Supervisor of River Inspection, who spent weekend after weekend tracing sources of pollutions and answering calls at night. I am sure he won't forget his long hours on the Belleville and Clifton problems, or his detective work on the Fairchild-Dumont pollution, or the many rainy days tracing colors, oil, froth and other pollutions. Lou is another man who does not have a week pass without getting calls at his home at all hours concerning a pollution problem. In this he was helped many times by W. Fleming.

There are others, but these men, not just once or twice, but constantly put in long extra hours, not for extra money, because this was not given, but just to see that their job was properly done.

At this time I wish to express my appreciation to Chairman Thomas Lazzio, Vice-Chairman Walter Davis, Commissioner Carmine Perrapato, Commissioner Ben Gordon and Commissioner Louis Bay, 2nd, for their understanding of the tremendous operating problems and their wise guidance, and particularly for the progressive policies they have established, which will enable Passaic Valley to soon lead the field again in Pollution Control.

PART IIViolations and Eliminations

Reports on polluttional discharges into the Passaic river within the Commissioners' jurisdiction (the watershed from the Great Falls in Paterson to the mouth of the river at Newark Bay), during 1971 together with reports on how they were eliminated during 1971, and the names of the River Inspectors assigned to investigate the pollution.

Violation & Elimination-Adco Chemical Co., 150 Rome Street, Newark, New Jersey.
October 6, 1971

(J. McLaughlin)

Inspector J. McLaughlin found a white latex emulsion flowing into the catch basin at the corner of Rome Street and St. Charles Street at 1:15 P.M., of October 6. This, then entered the Roanoke Avenue Storm sewer and polluted the Passaic River.

It was traced back to the above company where Mr. McLaughlin contacted Mr. R. Everett, plant manager. The material was traced back to a leaky drum in the storage area. The leaky drum was removed and the area cleaned, thus eliminating this pollution.

Violation and Elimination- Advance Piece Dye Works Inc., 112 River Road, Clifton, New Jersey.
March 26-29

(L. Cuccinello)

Mr. T. Harding, N.J. State Inspector, called Mr. L. Cuccinello on Friday, March 26, at 10:00 A. M., reporting a thermal pollution from this plant which was supposedly killing fish. Mr. Cuccinello and Mr. Fleming investigated and found a small volume of hot condensate water (90°F) going into Third River from this plant. Mr. D. Menitelli of this company informed Mr. Cuccinello that the company would install a new condensate return tank in the near future as they wish to re-use this clean water. In the meanwhile as of March 29, this condensate was repiped to the sanitary sewer. As of the end of the year no condensate return tank had been installed and the condensate water was entering the sanitary sewer.

Violation & Elimination-Alden-Leeds, Inc., 2145 Mc-
Carter Highway, Newark, New Jersey.
July 26, 1971

accident

(R. Goldstein)

A fire destroyed this building on July 26, 1971, During the course of putting out the fire, a large quantity of chlorinated cyanuric acid was washed into the Second River. Pollution halted when the fire was put out.

Violation & Elimination-American Biscuit Company, 2 Brigh-
ton Avenue, Passaic, New Jersey.
March 25 to June 11, 1971

(F Wendt)

A representative of the Manhattan Rubber Company called the Passaic Valley Sewerage Commissioners because of a clogged storm sewer causing a back-up into their plant. Inspector R. Goldstein was assigned to investigate, and his inspection revealed that the American Biscuit Company had a barrel cleaning operation near a storm drain. The washings, containing grease, went together with cooling water, into this storm drain, thence to Weasel Brook, a tributary of the Passaic River. It was material from this operation that had clogged the storm sewer, Mr. W. Marsden, Plant manager, was told that the barrel cleaning operation was polluting and the pollution must stop. Mr. Marsden immediately halted this work, and made arrangements to move this to another section, and pipe the liquid to the sanitary sewer.

Mr. Lubetkin wrote to them on March 31, requesting them to install traps so that the grease does not go into the sanitary sewer. The company replied on April 1, that this was done.

Subsequent sampling of their discharge was found to be polluting. Mr. Lubetkin wrote to this company again, on April 20, explaining that they were still polluting Weasel Brook, despite the fact that they had halted discharging the barrel washings to the storm sewer.

On April 22, the company replied that they have a company of consultant engineers investigating the plant sewage system, and as soon as a report is received on what is necessary to rectify the situation, they would proceed immediately.

On May 12, Mr. Lubetkin again wrote , explaining that a sample of their discharge taken May 6, was extremely polluting. Also on May 12, Mr. Marsden wrote to the Commissioners that a contractor was hired to start Monday, May 17, to install the necessary plumbing to halt the pollution. Inspector F. Wendt reported plumbing work did start May 17 and continued until pollution was eliminated on June 11, 1971, by pumping polluting material to the sanitary sewer.

direction
river?

Violation & Elimination-American Brand Textile Corp.,
35 Eighth Street, Passaic, New Jersey .
December 9-13, 1971 (F. Wendt)

On December 8, 1971, two Newark College of Engineering students, Mr. T. Cassero and Mr. A. Reitano, Jr. reported to Mr. Lubetkin that a colored discharge was coming from Parra Print, Inc. Inspector F. Wendt was assigned to check this. On December 9, 1971, he discovered a discharge coming from the industrial complex (35 Eighth Street, Passaic) in addition to Parra Print. Mr. R. Baldecchi, the property owner, capped the pipe then traced it by digging the ground until he came to the source. On Saturday, December 11, the pipe was traced to the American Brand Textile Corp. On December 13, Mr. Lubetkin had a letter hand delivered to Mr. E. Dauber, president of A.B.T., directing them to cease pollution at once.

On December 15, Mr. Dauber replied that they have ceased all operations in this building and would advise the Commissioners as soon as they arrive at a decision whether to permanently abandon all operations or take the necessary remedial action. As of the end of the year, the plant was still closed.

Violation & Elimination-Armour-Dial, Inc., 179 Entin Rd.,
Clifton, New Jersey
February 23 to March 21, 1971 (R. Goldstein)

Pollution of the Passaic River, through the Entin Storm sewer, was traced back to this company by River Inspector, R. Goldstein. Mr. Lubetkin wrote to this company on February 26, 1971, informing them of the intermittent violation, due to carelessness, where spills of highly concentrated detergents are periodically washed into the storm sewer. On March 1, 1971, the plant manager replied that their investigation revealed careless handling of hose by truckers. The Commissioners were assured that a strict unloading procedure had been established to eliminate this problem.

Violation & Elimination- Armour Industrial Chemical Co.,
Meta Lane, Lodi, New Jersey.
April 6-29, 1971 (J. Perrapato)

Upon a routine inspection of Millbank Brook, Inspector J. Perrapato discovered a polluting discharge coming from this plant. Analysis of a sample taken April 6, confirmed high S.S., C.O.D., turbidity, and pH. Mr. Perrapato contacted Mr. E. Gall of this company and informed him of the pollution. Mr. Gall explained that the discharge was from liquid from testing tanks reaching the Storm line through floor drains. He stated they would repipe to the sanitary sewer.

violation & Elimination-Armour Industrial (continued)

Mr. Lubetkin confirmed Mr. Perrapato's visit and directive to halt pollution at once, in a letter to the company dated April 12, 1971.

Subsequent inspections by the river inspector during the entire week disclosed no further discharge.

On May 28, 1971, Mr. Gall wrote to Mr. Lubetkin, informing him that the tests referred to, only occur at five year intervals and that in the future all water from such tests shall be put into the sanitary sewer.

Violation & Elimination-Artic Ice and Fuel Co., 158 Semel Avenue, Garfield, New Jersey
February 17, 1971 (J. Perrapato)

Oil in Fleischer's Brook was traced to a catch basin on Semel Avenue, Garfield, by Inspector J. Perrapato. Investigation revealed that the oil had come from the tanks of the above company. On February 22, Mr. Lubetkin wrote to the company directing them to clean the catch basin before the oil was washed into the stream and to do whatever else was necessary to keep the oil from reaching the catch basins again. A copy of the letter was sent to the City of Garfield, with an accompanying letter, stating that since the catch basin is owned by Garfield, they are responsible to see that it is cleaned. Farfield did clean the catch basin in early March, 1971.

On March 2, 1971, the Commissioners received a reply from the company explaining that the oil spill was caused by vandals, who had broken into their property and pulled plugs from oil trucks. They also explained that this incident was reported to the Garfield police, which are now patrolling the plant.

Violation & Elimination-Ashland Chemical Company, 221 Foundry Street, Newark, New Jersey.
May 17 to June 11, 1971 (J. McLaughlin)

On May 17, 1971, Inspector J. McLaughlin sampled washings from this company, entering into the Roanoke Avenue Storm Sewer at Avenue P. Analysis of this sample indicated it was not only highly polluting, but contained flammable and explosive materials. The company was notified by Mr. Lubetkin on May 26, (copy to the City of Newark) to cease pollution at once, and they were warned against discharge to the sanitary sewer without proper pretreatment. Mr. M. Elias, Jr., District Manager, replied on May 28, informing that plans to permanently correct this situation were in the Engineering Department and would be sent to the Commissioners within two weeks. In the interim period, they would catch their liquid waste and have it disposed of by a reputable scavenger.

caused by third party?

Violation & Elimination-Ashland Chemical Company, (continued)

Subsequent samples were bad, so Mr. Lubetkin telephoned Mr. Elias and was informed that the matter would be checked. In a letter dated June 11, Mr. Elias stated that the objectionable samples were caused by two outside tank wagon firms who pick up at the Ashland facilities. The outside trucking firms have been notified to cease this practice at once.

Mr. Elias met with Mr. Lubetkin and submitted plans to connect to the Newark sewer system through an oil separator system. Mr. Lubetkin informed them that the Commissioners had no objection to the system, but the City of Newark has final say on any connection of its system..

Inspection by the Commissioners' inspectors indicates that all truck washing operations have ceased at this location, pending the new sewer connection, thus the violation is eliminated.

As of the end of the year, the oil separator system has not been installed.

Three Violations & Eliminations-Atlantic Chemical Corporation, 10 Kingsland Road, Nutley, New Jersey .
April 13, 1971 (D . Miele, Jr.)

On April 13, about 12:50 P.M., this company received a delivery in a sealed Sea-Land container containing a cargo of 30-gallon steel drums containing water dispersable liquid pigment (yellow). When the seal was broken and the door opened, liquid material poured out and covered the ground, running into the storm sewer. Investigation revealed that approximately 10 drums or 300 gallons of this pigment reached the ground. Three workers dipped up some material and washed some with a fire hose into the storm sewer. In reply to a letter sent to this company concerning this matter, management claims that as soon as they learned of the situation, they halted the hose-down and the remaining material was absorbed with saw-dust and sand and removed. Personnel were directed by management, that in the event of future spills, dry clean-up methods must be used and they claim a substantial supply of absorbent material is now readily accessible to that area.

August 11-13

(D. Miele, Jr.)

The heavy rains of August 11 washed red dye into 3rd. River. Mr. D. Zinger was told by Inspector D. Miele, Jr. to clean yard area, so that future rains will not pollute the river. Mr. Miele reported this was completed on Friday, August 13, 1971.

Three Violations & Eliminations - Atlantic Chemical Corp. (con't)October 14 to 24, 1971(D Miele, Jr.)

Oil coming over the dam at Third River was traced back to this company by Inspector D.Miele, Jr. It appeared that an oil tank leaked, and oil seeped into a ditch, thence to Third River. Mr. C. Danzer, plant manager, was contacted and he immediately erected a dirt barricade to keep the oil from reaching the ditch. He then pumped the remaining oil from the first tank into a spare tank hoping to halt the leaking. This was not successful.

On October 18, Mr. Lubetkin wrote to this company informing them that a dirt barricade is extremely temporary, as oil will seep through. Mr. Lubetkin requested information on what is being done for a permanent solution. A reply dated October 26, outlined the following steps taken:

- (1) Barricaded the oil seepage and skimmed it regularly so that no oil reached Third River.
- (2) Pumped out and cleaned fuel oil tank nearest to point of seepage, as being the obvious suspect. No apparent leaks were discovered, but oil continued to seep into ground.
- (3) Pressure tested all underground fuel lines.
- (4) Transferred oil from second tank into sound empty tank and internal inspection showed no leaks and the seepage seemed to have stopped.
- (5) To guarantee integrity of second tank, welder hired to weld all internal seams. (Note: this was not successful, so subsequently they contracted with American Pipe & Tank Lining Company of Secaucus, to install a monolithic lining inside the tank.

A one inch coating of "Perm-O-Line" was used and work was completed November 5, 1971.

Violation & Elimination - Bayonne Barrel & Drum Co., U.S.
Highway No. 1 & Raymond Blvd., Newark, N. J.
October 28 - November 8, 1971 (J. McLaughlin)

Inspector J. McLaughlin, together with Mr. R. Altiero, from the City of Newark's sewer department, while attempting to trace source of pollution in Harrison Ditch Storm Sewer, inspected the yard of this company. They found a polluting material going from the yard to the Passaic River through the Harrison Ditch Storm Sewer. They pointed this out to Mr. F. Langella, President of the company. Mr. Langella stated that this liquid was a recent (10/28) spillage and that he would take corrective measures to prevent reoccurrence. Mr. Langella stated that he has instructed his employees to empty residue of drums into a collection pit. The liquid is then pumped to a storage holding tank before being released to the Newark Sanitary Sewer. Mr. McLaughlin inspected the premises on November 8, 1971, and reported that no further run-off was visible.

Violation & Elimination-BASF Corp., 50 Central Avenue,
Kearny, New Jersey.
July 13, 1971

(J.Collello)

At 11:45 A. M. on Tuesday, July 13, Mr. Lubetkin received a call from Mr. T. Harding, of the State Dept. of Environmental protection, saying that he had received a call from a workman at the above company that a polluting material was being discharged into the Passaic River. Inspector J. Collello was sent to investigate and he reported that, together with Supervisor L. Cuccinello and Chief Inspector W. Fleming, he discovered industrial waste was coming out of the ground and flowing into the Passaic River. When it was shown to company officials, they ordered immediate excavation of the area. They found a break in a 3" pipe which was a temporary sanitary line used for a construction trailer. The sewage from the main line was backing up and flowing out thru the break. The break was immediately repaired that same day. The temporary line was later removed.

Violation & Elimination-Town of Belleville.

Meadowbrook Storm Sewer.

June 9 to July 30, 1971

(R. Goldstein)

Some of the pollution from Newark's Meadowbrook Storm Sewer was traced on June 9 & 10 by Newark's Public Works Department, aided by Inspector R. Goldstein, to outlets in the Town of Belleville. On June 15, Mr. S. Friscia, Director of Public Works, wrote to the Town of Belleville informing them of illegal connections leading into the Meadowbrook Storm Sewer from Mr. Foamy Car Wash, S.O.S. Auto Body, and the Clara Maass Hospital, all located in Belleville. Mr. Lubetkin wrote to the Town of Belleville also informing them of the pollution and requesting they cooperate with the City of Newark to eliminate the sources of the pollution.

On June 29, 1971, Mrs. M. Senatore, Director of Public Works of Belleville, wrote to Mr. Lubetkin informing him that the Clara Maass Hospital is scheduling work in correcting their illegal connection on July 6, and copies of notices sent to F. & N. Della Volpe of 11 Franklin Street and L & F. Peci of 341 Parker Street, regarding property at 6 Honiss Street, requesting correction of illegal connections, were also sent to Mr. Lubetkin.

The violation from Clara Maass Hospital was eliminated on July 16, when they had their illegal connection reconnected to a sanitary sewer.

The violations from 11 Franklin Street and 6 Honiss Street, (Foamy Car Wash and S.O.S. Auto Body respectively) were sealed July 29 and 30, respectively, thus eliminating these pollutions.

Violation & Elimination-Berle's Carton Co., Inc., Page 69
86 Fifth Avenue, Paterson, New Jersey.
September 15, 1971 (L. Tateo)

Hazardous 2

The intense rains and sewer back-ups caused flooding in the cellar of this company. Two pumps were installed and the liquid, containing blue and red dyes, was pumped to the street, thence to a storm catch basin reaching the Passaic River.

Mr. Cuccinello and Mr. Tateo informed the engineer, that in the future, the hose from the pumps should discharge to the sanitary sewer.

Violation & Elimination-Samuel Braen Company, Sand and Gravel Plant, 662 Goffle Road, Hawthorne, New Jersey.
May 20 to June 23, 1971 (T. Costello)

On January 8, 1971, Mr. Douglas Clark, an Engineer for the Department of Environmental Protection, sent a copy of an administrative order from the Department to this company dated November 23, 1970, based on pollutions of May 13 and September 2, 1970. Mr. Lubetkin requested that River Inspector T. Costello take samples of the discharge from this company to Goffle Brook to check on pollution. Mr. Costello reported on January 22, that he had been unable to get any samples, since the operation had been shut down since December 18, 1970, and would not resume until about March 15, 1971.

Operation did start on March 15, but, Mr. Costello reported, the water used between March 15 and May 20, 1971 was absorbed into the ground, and there was no discharge to Goffle Brook until May 20. Sample taken on May 20 from their settling pit was turbid and polluting, but the sample entering the brook was better (indicating settling out of solids in the storm sewer). Samples were retaken on June 4, June 11, and June 17, and all samples were polluting, with high suspended solids.

On June 22, Mr. Lubetkin wrote to the company, informing them of the pollution. On the same date (mail crossed), Mr. G. Miller, General Manager of this company, wrote to the Department of Environmental Protection (copy of letter to PVSC), stating that they had just completed installation of a new pump to return water from Quarry Operations, that had previously discharged to the brook for reuse.

Inspector T. Costello reported that as of June 23, all waste water was being pumped into the quarry pit, thus eliminating pollution of Goffle Brook. This was confirmed in a letter to the Commissioners dated June 25, 1971.

Violation & Elimination - John Blondel & Son, 90 Glenridge Avenue, Montclair, New Jersey
May 4 to 20, 1971 (R. Goldstein)

On May 4, D. Clark of the E.P. referred a complaint to the Commissioners concerning oil pollution from the above firm. Investigation revealed poor housekeeping, wherein oil reached Tony's Brook, a tributary of the Passaic River. On May 5, Mr. Lubetkin wrote to this company and received a reply dated May 7, thanking the Commissioners for calling the matter to their attention and stated that corrective steps have been taken. On May 20, inspection revealed the area had been cleaned, and no further pollution existed.

Violations & Eliminations-City of Clifton.Kuller Road SewerIntermittent to February 10, 1971

(R. Goldstein)

The City of Clifton has a low sewer in Kuller Road which is normally pumped into the line at Hazel Road. The sewer, intermittently overloaded, rather frequently had pump failures which then allowed the sewerage to overflow, at the manhole in Kuller Road. The sewage flowed to a ditch which led to, and polluted Weasel Brook.

At the request of the Commissioners, a new pumping station to handle this flow has been built by the City of Clifton. It was completed on February 10, 1971, thus eliminating this pollution.

Svea Avenue Storm SewerApril 19, 1971

(R. Goldstein and F. Wendt)

On April 19, at 10:30 A. M., Inspector R. Goldstein found a polluting discharge coming from the Svea Avenue Storm Sewer into Weasel Brook. He reported it to the City of Clifton and they located a blocked sanitary line on Fornelius Avenue which caused an overflow into the storm sewer. The line was cleared by 2:00 P.M., the same afternoon eliminating the pollution.

September 23, 1971

Pollution in Weasel Brook was traced back to the Svea Avenue Storm sewer by L. Cuccinello, W. Fleming and F. Wendt of the Commissioners' Inspection Department. Manholes were lifted and at the manhole located at Svea Avenue and Fornelius Avenue, sanitary sewage was overflowing into the storm sewer. The City of Clifton's crew was summoned and they removed a blockage from the sanitary sewer, thus halting the overflow and pollution.

Manhole on Bank of Third RiverJune 9-30, 1971

(D. Miele)

The City of Clifton has a manhole on the east bank of Third River just off the I.T.T. parking lot, or near Kingsland Road. The manhole was in a bad state of repair, and sanitary sewage leaked into Third River through cracks in the mortar. The City was notified, and repaired the manhole. Inspector D. Miele reported that work was completed on June 30, 1971 at 3:20 P. M., thus eliminating this pollution.

Violations & Eliminations- City of Clifton (continued)Entin Storm SewerIntermittent May 14, 1971

(F. Wendt)

This sewer serves to drain the low lying Entin Industrial tract in Clifton to the Passaic River. Intermittent pollutions from this sewer indicated either an illegal connection from one or more of the industries, or careless housekeeping, wherein industrial wastes are allowed to reach the storm sewer catch basins. On June 28, Mr. Lorenz, wrote to the Greater New York Box Company and the Glamorine Products Corp., informing them of the pollution and requesting that they instruct employees concerning the proper disposal of spilled material and debris. The companies were also directed to clear up a situation where a low section of land collects water creating an unhealthy situation. Since all samples taken since May 14, were satisfactory, this discharge is being removed from the violation list, however, the Commissioners monitor it closely and if any further violations occur the City of Clifton had promised cooperation in prosecuting violators. An up-to-date drawing of the drainage system is being prepared by Clifton to aid in tracing any future "accidents".

Sanitary Sewer BreakAugust 27 to September 1, 1971

(D. Miele)

The heavy rains, at the end of August, caused a 15" clay sewer under River Road near Third River, to break. Six sections of pipe (total length of 24 ft.) were replaced. Work started at 9:30 A. M. on August 31, and was completed at 12:45 A. M. on September 1, 1971, thus halting the pollution of Third River.

15" Sanitary Line over 3rd. RiverSeptember 1-4, 1971

(D. Miele)

A 15" cast iron line carrying sanitary waste under the bridge crossing Third River at River Road, Clifton, started to leak at several joints. The Department of Public Works' crew, headed by Mr. Bush, sealed these joints. The work was completed on Saturday, September 4, 1971, at 5 P.M.

20" Concrete Storm Sewer-Main Ave., & Route 3.November, 1971.

(F. Wendt)

This storm sewer, located at Main Avenue, north of Route 3, in the rear of the Firehouse, discharged a polluting material into Third River. The pollution generally consisted of high coliform and intermittent high C. O. D. and turbidity. This sewer is actually a State Highway sewer, and has a County Sewer (Main Avenue), connecting to it. The City of Clifton's Sewer Department obtained drawings from the County Engineer's office,

Violations & Eliminations-City of Clifton(continued)20" Concrete Storm Sewer-Main Avenue & Route 3(continued)

so that the City and the Commissioners could sample this sewer at various locations as soon as dry weather returned. The De-Camp Bus Company was discovered connected to this sewer and was reconnected to the sanitary sewer at the Commissioners' direction.

Subsequent samples of this discharge were satisfactory.

Violation & Elimination - Como Textile Printers Co., 193
East Railway Avenue, Paterson, N. J. (L. Tateo)
 July 22

In response to a call from Mr. Scott, Clifton Board of Health, Assistant Chief Inspector, W. Fleming contacted a Mr. J. Eng, of Clifton, who told him that while fishing in the Passaic River on July 22, at 1:00 P.M. he saw a color coming from a large pipe near Nash Park, (Merselis Avenue Storm Sewer). Mr. Scott had previously informed Supt. L. Cuccinello about a colored discharge in Wabash Brook which passed the property of the Clifton Board of Health.

Mr. Cuccinello, together with Mr. Fleming and Inspector Wendt, started a back tracing job lifting manholes in a storm line coming from Paterson for about one mile. The source of the color was not found that evening so the job was continued the next morning and traced to the above company having a connection on Pennsylvania Avenue.

Investigation revealed that this company has received a permit from the City of Paterson to connect to the sanitary sewer. Mr. Blanchfield, Plant Manager informed Inspector Tateo that the City plumbing Inspector (Charles Baker) approved the connection on April 21, 1971. The job was completed by Vellone Plumbers, Haledon, on May 4, 1971 and it was not until Passaic Valley Sewerage Commissioners traced the pollution to this company did they realize that the connection was to a storm sewer instead of a sanitary sewer. The plumber was contacted and Mr. P. Vallone promised to reconnect the outlet to the sanitary sewer on Monday, July 26. Unfortunately, Mr. Vallone passed away over the week-end.

Meanwhile the mis-connected sewer was temporarily sealed and the industrial waste was channeled to a pit having a sump pump which pumped the waste to an old sanitary sewer. The line was dye treated by Inspector Tateo on Saturday, July 24, and proved out satisfactory thus eliminating the pollution. Follow up inspections were made and as of the end of the year the new sewer is still sealed and the waste is being pumped through the old sewer to the sanitary system.

Violation & Elimination - Crucible Steel Co.,
Spaulding Works, 1000 South Fourth Street, Harrison, N.J.
 December, 1969 to September 1971 (L. Cuccinello, W. Fleming and J. Colello)

A yellowish oily material flowed into the Passaic River from a large culvert owned by this company. This company claimed that a number of other companies leased land on an industrial tract owned by Crucible Steel Company, and the polluting material was not emanating from Crucible Steel itself, but from one of the other tenants, and therefore, the Crucible Steel Company would not be liable.

The Commissioners maintained that since the culvert from which this material discharged into the Passaic River was owned by Crucible Steel Company, Crucible Steel Company was liable for any polluting material emanating from the culvert. Since there seemed to be a difference of opinion concerning liability, the Commissioners instituted a suit against Crucible Steel Company. An Order to Show Cause was originally returnable on May 15, 1970, but was postponed to July 17, 1970, and continued to September 18, 1970.

On September 18, 1970, Crucible reported they had eliminated all of the pollution emanating within their property and had traced oil to other users of the sewer. They requested additional time to check suspected oil sources on the Charles F. Guyon and the Harris and Sons Steel Companies, and perhaps other parties.

Judge Lynch signed a Civil Action Order, bringing in Charles F. Guyon, Inc., Miele Brothers Trucking Company, Aszo Steel Company, Gabest, Inc., Prince Packaging Products, Inc., Joseph Supor Trucking Company, Rose Ribbon and Carbon Mfg. Co., Inc. (corporations), and Miles A. Galin.

On October 23, 1970, progress reports were submitted and the Commissioners stated that the volume of the pollution had decreased. Crucible was ordered to submit a detailed plan for locating and halting the remaining pollution to Mr. Lubetkin and they were to return to court and report on November 20, 1970. Since work was progressing, the November 20 hearing was postponed to December 4, then to February 11, 1971.

On February 11, Crucible reported to the court that it had located the source of pollution, but since it was from a line coming from other property, Crucible wanted permission of the Court to seal the line. The Court directed the line to be sealed within 30 days,

violation & Elimination - Crucible Steel Co. (continued)

and all pollution halted within 90 days, or else the Court would consider appointing an outside consultant to recommend whatever necessary be done to halt the pollution, costs to be paid by Crucible Steel.

On March 11, 1971, at 2:00 P.M., the Heyrich Company installed a Cherne plug in the suspected line. A very slight film of oil was noted subsequent to the plug installation, but this could be residual oil from the pipe and banks; however, samples taken on March 23, at 10:30 A. M. and again at 1:00 P.M. showed a low pH, (Acid). Mr. Lubetkin telephoned Mr. Whinn, and confirmed his conversation by a letter dated March 23, requesting that the consultant be immediately informed, so he could locate and halt this acid pollution.

No reply was received, so Mr. Lubetkin wrote again on April 12, informing them that acid was again detected on April 5. The Commissioners received a letter dated April 13, from Mr. W. Bradley, stating they have located the source of acid and setting forth a pre-treatment program to divert this material from the river to the sanitary sewer. The time table showed this will be completed shortly after July 15, 1971. Mr. Lubetkin replied on April 20, 1971, giving neutralization parameters and requesting residual oil be cleared from the sewer.

Observation of their outlet showed that the oil was being cleaned from the banks, slowly, by tidal action, and that the silt from the sewer had a cleaner look (brown not oily black). However, a sample of their discharge on May 18, contained a C. O. D. of 174 ml/l; therefore, Mr. Lubetkin wrote to them on May 26, concerning this and requested an up-to-date progress report on what has been accomplished.

On June 1, 1971, Mr. Bradley wrote to Mr. Lubetkin reporting that the condition of the river banks continues to improve and they feel, they have solved the oil problem. A pH meter had been ordered and a pretreatment acid holding reservoir to the sanitary sewer was completed.

On June 18, Mr. Lubetkin wrote to Crucible that he had observed a small oil slick at 1:15 P. M. and showed the slick to Mr. Art Whinn. Mr. Whinn informed him that an internal inspection had been scheduled for July 1. On June 28,

Crucible Steel Company continued

Mr. Lamborn, Crucible Manager, wrote to Mr. Lubetkin, informing him of an internal check scheduled for July 1. Unfortunately, due to the Public Hearing on Bonds on that date, Mr. Lubetkin was unable to check this himself, but was represented by Mr. L. Cuccinello. On July 16, Judge Lynch advised that a pretrial conference was being scheduled for September 27.

On July 20, Mr. Lubetkin inspected the inside of the sewer with representatives of Crucible. A slight oily film was visible at the mouth, but could not be seen further in the sewer. Therefore, either Crucible's contention that the oil comes from the silt, near the mouth of the sewer, purging itself of old oil was true, or the lack of sufficient light prevented us from seeing the slight sheen indicating the oil.

During August, the discharge was very good, On occasion spots of oil could be seen leaving the outlet, but a study of the water action did reveal, that, as the tide came in, spots of oil from the river, did, in fact, enter the Crucible outlet, and it appeared to be this extremely small amount of oil that is visible leaving the outlet as the tide went out.

During August and September, no pollution could be detected. The outlet area was a mess from the rubble of the storm Doria, but the bank was clean of oil, within the tidal reach. As of the end of September, 1971, this violation is considered eliminated

An automatic pH meter had been installed at the outfall to monitor the discharge to the river. Also, automatic neutralizing equipment was installed at their pretreatment tank to treat the discharge to the sanitary sewer.

At the end of December, the pH meter mal-functioned and had to be sent back to the factory for repairs. Mr. Lamborn promised to buy a spare so that in the future, a mal-functioning unit would be replaced while it is being repaired.

Violation & Elimination-Curtiss-Wright Corp., 1 Passaic Street, Wood-ridge, New Jersey
Intermittent to March 18, 1971

(J. Perrapato)

The discharge from this company to Feld's Brook intermittently contained oil. Because of complaints of the Commissioners, the company has installed a complete Dorr-Oliver treatment plant for the removal of this oil, however the plant had trouble getting in service, due to problems with the sludge recycling pump and with the caustic and polymer feed systems. Dorr-Oliver had a start-up engineer on the job working on these problems. The Aurora pump people had two men on February 22, checking out the sludge recycling pump and they had the system working for about a day.

Violation & Elimination-Curtiss-Wright Corp., 1 Passaic Street, Wood-ridge, N.J. (continued)

Inspector J. Perrapato, reported that the system went on the line February 24, and appeared to operate properly. However, on March 18, a sample of the discharge was high in suspended solids but a subsequent sample taken March 25, was satisfactory. It appears there was a break-in period for the new equipment and this was monitored by the Commissioners.

Violation & Elimination-Dale Brook Finishing Company, Ho-Ho-Kus, New Jersey
April 8 & 27, 1971 (T. Costello)

This company operated a six chambered activated sludge treatment plant with a rated capacity of 150,000 gallons per day, discharging to the Ho-Ho-Kus Brook. The Passaic Valley Sewerage Commissioners monitor their effluent routinely. During the month of April, five samples were taken and analyzed, of which two, the April 8, and April 27, samples were unsatisfactory.

Plant Manager, Robert Feitlowitz, was contacted by Inspector T. Costello concerning the sample of April 8. Mr. Feitlowitz attributed the poor effluent to snow and heavy rain on Tuesday, April 7, causing a washdown of banks into the treatment plant. Conditions corrected themselves. Samples of their discharge, taken May 5, 20 and 27 were satisfactory.

However, on June 1, 1971, the Dale Brook Finishing Company closed its Waste Treatment Plant. This plant was built in 1956, as a result of legal action started by the Passaic Valley Sewerage Commissioners against this company in 1954, to relieve the pollution of the Ho-Ho-Kus Brook by the then "Ho-Ho-Kus Bleachery". The treatment plant, an activated sludge process, was one of the first textile waste treatment installations in the northeast United States. The plant, discharging its effluent into the Ho-Ho-Kus Brook, was designed by an M.I.T. engineering team, headed by Dr. R. Eliason, and his Assistant, Dr. R. McKinney, under a research grant sponsored by the National Institute of Health. The plant effluent had been monitored continuously by the Passaic Valley Sewerage Commissioners' Department of River Inspection, and had successfully met the standards of discharge. It had been used as a model for similar installations in the textile and related fields.

On June 1, 1971, after all its wet operations had closed down, the company, a Division of D.H.J. Industries, became a corporation technical center and a dry process manufacturing facility.

Violation & Elimination-DeCamp Bus Service, Allwood Road
and Main Avenue, Clifton, New Jersey.
June 23 to August 24, 1971 (F. Wendt)

This company has a bus washing area, where buses are steam cleaned and washed. The yard drain pits were connected to the storm line, which in turn went to Third River. Mr. Kolster, General Manager, was informed of this violation by River Inspector F. Wendt.

Mr. Kolster wrote to the Commissioners on July 9, stating that his plumbers had applied for a permit to correct the situation, and thanked the Commissioners for bringing this to their attention. On July 13, Mr. Lubetkin wrote to Mr. Kolster, requesting speedy work, and also requesting that the Passaic Valley Sewerage Commissioners be informed when the work is completed, so that they may test the outlet.

Although Mr. Kolster did not supply the information, Mr. Wendt, the Commissioners' Inspector,, reported that work was started by West Essex Plumbing of 90 Clinton Road, Fairfield, N.J., on Wednesday, August 4, and completed Tuesday, August 24, 1971.

A new line was connected to the sanitary sewer through a 5 foot deep tank and an oil separator.

Violation & Elimination-Diamond Shamrock Co., Harrison,
New Jersey
December 13-23 ,1971 (J. Colello)

One of the polluttional discharges uncovered by Mr. T. Casera and Mr. A. Beitano was one of the outlets from Diamond Shamrock (See Special Report No. 12).

On December 13, Inspector J. Colello and Supervisor L. Cuccinello sampled all six outlets that were discharging liquid into the Passaic River (Outlets 2,3,5,11,19 and 25 on the Commissioners' outlet sheet)

Analysis of these discharges showed that one of them, #5 was polluting.

On December 20, Mr. Lubetkin wrote to this company informing them of the pollution and directing them to halt the pollution at once. They were also directed to write to the Commissioners to inform them what will be done together with a time schedule indicating when the pollution will be halted. As of the end of the year no reply had been received.

Inspector Colello reported that he visited the plant (with L. Cuccinello) on December 22 and was informed by Mr. R. Bachtlor, Plant Engineer that there were six pipes leading to this 12" outlet to the river. They had already eliminated three of these outlets, leaving only three condenser cooling lines remaining.

Violation & Elimination- Diamond-Shamrock (continued)

A sample was taken of this discharge on December 22, at 11 A. M. and the results were still polluting.

Mr. L. Cuccinello visited this plant again on December 29, and met company representatives who informed him that when they found out that the sample of December 22 was still polluting they then diverted the remaining three outlets to the sanitary sewer on Thursday, December 23, therefore, no further pollution enters the river from this company.

However, since the cooling water was supposed to be clean the company is assuming that the pollution came from a leak into a broken pipe and they intend to replace all the old pipe with new and again divert the clean cooling water to the river. Since there is no longer a pollution from this company, they are being removed from the violation list, however, as soon as a flow starts from this outlet again, it will be sampled and analyzed to be sure pollution does not exist.

Violation & Elimination-Eastern Oil Company, 1510 Kennedy Boulevard, Jersey City, New Jersey.
March 16-22, 1971

While delivering oil to the Richfield Village Apts., Brown Place, Clifton at about 4:00 P.M., on Tuesday, March 16, the driver allowed an overflow of about 350 gallons of #4 oil. The oil entered the storm drains and reached Weasel Brook through the Athenia Storm Sewer. The Oil Company, upon being notified of the problem by the Clifton Board of Health, trapped oil in various places and siphoned off most of the oil into tank trucks. They worked from Wednesday through Saturday and again on Monday, March 22. The company used three trucks of 3,500 gallon capacity at various locations.

Violation & Elimination-Mr. & Mrs. Edelbock, 563 Passaic Avenue, Kearny, New Jersey
Jan., 1967 to May 5, 1971 (L. Cuccinello, R. Bingham, and J. Collello)

A barge, located opposite Christopher Columbus Park, in the town of Kearny, was a source of odors during dry summer days. Tests by the Commission in 1967, proved that the wastes from the sanitary facilities of this barge were directly entering the Passaic River through a pipe below the water line.

On February 28, 1967, Mr. Lubetkin wrote to the Edelbock's, owners of the barge, that their discharge was illegal and to halt the pollution at once. On March 21, 1967, Mr. Edelbock replied, stating the sewerage was connected to a septic tank, which had rusted away and he intended to install another septic tank. Mr. Lubetkin replied on April 21, pointing out that the discharge from the septic tank to the river would also be polluting and therefore, was not acceptable.

Violation & Elimination - Edelbock (continued)

The situation was a curious one, the barge was moored to public land(Kearny Park). They had utilities (water, electricity, telephone) which reached them through public park right-of-way, and a fence along the river, which was erected by the town, had a gate installed in it for the convenience of the Edelbocks.

Since the pollution was not large, compared to that of Newark, the Commissioners were reluctant to take this matter to court, instead letters were written to the Edelbocks and the Town of Kearny, and in fact, a conference was had with Town Officials on January 22, 1969, to see if the town could do anything to halt the pollution, but nothing was accomplished. Mrs. Edelbock told the Commissioners' personnel that she wanted to get off the barge, but her husband would not get her a place to live.

Finally, legal action was started by the Commissioners, and on September 24, 1969, a Restraining Order was issued against the Edelbocks.

Pollution continued; therefore, on May 14, 1970, the Commissioners' Attorney wrote to the Edelbocks, advising them they were not complying with the terms of the Order. He also advised that if the pollution was not abated by the Commissioners' meeting of May 28, 1970, he would recommend contempt proceedings. This was done, and Counsel was directed to proceed with any legal steps necessary to halt the pollution.

On September 18, 1970, Judge Lynch told Mr. Edelbock that if the pollution was not halted within one week, he would order the houseboat closed, and he advised Mr. Edelbock to report on how long he would need to remove his things from the houseboat. Mr. Edelbock said he would install a septic tank by the following week. Mr. Lubetkin reported to the Court that a septic tank was not satisfactory and would not halt the pollution. The Judge carried the matter to September 25, 1970.

On September 25, 1970, Mr. Edelbock reported that he had installed a tank on the boat and there is no connection to the river. The Judge carried the case to October 9, to give the Commissioners a chance to inspect and report. Inspection revealed that said tank was installed, but questions as to how the tank would be emptied and where the waste would go remained unanswered. Mr. Lubetkin informed the Court that this was unsatis-

Violation & Elimination-Edelbocks (continued)

factory, as the tank would have to be emptied often (depending on usage), and the probability is that it would be emptied or overflow into the river, since there appeared to be no practical way to empty it. Subsequent examination revealed a hole was in the bottom of tank so sewage ran into river.

On October 15, 1970, the Court ordered Mr. Edelbock and family off the barge by November 9, 1970, and when he did not obey, the Court ordered the Sheriff to apprehend and incarcerate the Defendant. A copy of this order, together with cost, were sent to Sheriff Bonelli on November 16, 1970.

On April 6, Mr. Edelbock was arrested and jailed. On April 21, the Commissioners consented to his release if he vacated the barge no later than April 28. The Court also ordered the removal of the barge itself within 6 months.

Finally, as of May 5, 1971, the Edelbocks moved from the barge and it has been closed, halting the pollution. However, despite the Court order, and despite a letter written to I.E.Mischel, Mr. Edelbock's attorney, by the Commissioners' Counsel on November 24, as of the end of 1971, the barge still languishes illegally at the same mooring.

Violation and Elimination-Fairchild -Dumont Electron Tubes,
750 Bloomfield Avenue, Clifton, New Jersey.

June 14-19

(F. Wendt)

On the night of June 14, 1971, a boiler room accident to a fuel line (detail not clear) occurred, which allowed a large quantity of oil to escape (estimates of amounts vary from 300 to 500 gallons). The company started to prevent the spread of oil, but was not successful, as a significant amount of the oil reached a near-by catch basin which connected to the Scoles Avenue Storm sewer, which, in turn, leads to MacDonald's Brook and Hughes Lake in Passaic's Third Ward Park.

The heavy rain on Tuesday, June 15, washed the oil from the storm sewer until it reached Hughes Lake, wherein fish and ducks were killed and other evidences of ecological damage were manifested.

The Commissioner's personnel worked all day, Wednesday, June 16, attempting to trace the source of the oil by lifting manholes in the storm sewers, but it was not until 7:00 P.M.

violation & Elimination
Fairchild-Dumont Electron Tubes (continued)

that it was traced to the Fairchild-Dumont Company by Supervisor of River Inspection L. Cuccinello. Mr. Cuccinello is to be commended for his perseverance and ability in this work. Mr. Cuccinello was told by the guard at the gate that all personnel had gone home; however, when he persisted and pointed out the urgency of the situation, the guard called Mr. Arthur Nichols, Manager, who in turn contacted Mr. J. Paquette, Stationary Engineer, concerning this matter. Mr. Cuccinello informed Mr. Paquette that this material must be cleaned up immediately, as it was not only in Hughes Lake, but it was thence going into the Passaic River.

When informed of the situation, at his home that evening by Mr. Cuccinello, Mr. Lubetkin placed a call to Fairchild-Dumont at 7:45 P. M. and spoke to the guard at the west gate, requesting the telephone number of an official of the company, telling the guard that it was extremely important. The guard put Mr. Lubetkin through to Mr. Paquette, and after explaining to him the seriousness of the situation, Mr. Lubetkin again requested the telephone number of an official. Mr. Lubetkin was informed that Mr. Nichols was unavailable, and that no other official was available, but that Mr. Paquette would attempt to have somebody call Mr. Lubetkin.

At 8:20 P. M., Mr. Place, Maintenance Supervisor, called Mr. Lubetkin and again the problem was explained, including the seriousness of the situation, and the fact that the discharge of the oil was now considered a criminal offense by the Federal Authorities, and that the responsible parties could not only be fined, but put in jail if prompt remedial measures were not taken. Mr. Place assured Mr. Lubetkin that he would contact the proper people, and that Fairchild-Dumont would start the clean-up operations of Hughes Lake the first thing in the morning. Mr. Lubetkin assumed that the remainder of the night would be used getting things set up, so that actual clean-up operation could physically begin the first thing in the morning. Mr. Lubetkin told Mr. Place that he expected a call at his office from someone in charge before 9:30 A.M.

Mr. S. Wozny, Engineer of the City of Passaic, was kept informed of events by Mr. Cuccinello and his Sewer Foreman, S. Alaimo, and on the morning of June 17, he contacted the Esso Refinery in Linden and explained the problem to a Mr. H. Weidman, who volunteered to come down and look at the situation. After he saw the oil-covered lake he called Coastal Refineries, a company that specializes in cleaning oil spills, and was told they would be there at 2:00 P. M.

Violation & Elimination
Fairchild-Dumont Electron Tubes (continued)

Mr. Nichols of Fairchild called Mr. Lubetkin at 9:15 A.M., Thursday, June 17, and again he was told the seriousness of the situation, and he stated things would be taken care of immediately. When asked, Mr. Lubetkin told him that Coastal Services was the only contractor he knew of to handle this type of situation, but that possibly the oil supplier could give him the name of another. Mr. Nichols contacted his oil company, who in turn referred him to Coastal Services also.

At 2:00 P. M., Mr. Lubetkin visited Hughes Lake and was extremely disappointed that, as of that time, no work had been done on removing the oil from Hughes Lake, although a representative of Coastal Services, who stated he was waiting for trucks and equipment to arrive, was on the site. In addition to Commission personnel (L. Cuccinello, W. Fleming, F. Wendt), Mr. A. Wendelhem of the Department of Environmental Protection, Division of Fish and Game, Mr. J. Burtyk, of the Clifton Board of Health, and Mr. S. Wozny, Engineer of Passaic, expressed concern on getting the oil cleared.

At approximately 2:30 P. M. a conference was held at the Fairchild-Dumont plant. In attendance were Mr. Lubetkin and Mr. Cuccinello from the P.V.S.C., Mr. S. Wozny of the City of Passaic, and Mr. Nichols and Mr. C. Teppel, Purchasing Agent from Fairchild-Dumont.

Mr. Lubetkin first asked to see Mr. Walzer, Vice President, but was told he was very busy and that Mr. Nichols had authority to handle everything. Mr. Lubetkin informed him that the Commissioners were very disappointed at the slow pace of the clean-up, but even more perturbed that no report of the oil spill had been made to the Commissioners by Fairchild from the time of the accident (Monday night) until the oil was traced to the company (Wednesday night), and if such a report had been made, it might have been possible to contain and remove the oil from MacDonald's Brook before it reached Hughes Lake and caused damage. Mr. Nichols stated that he was sorry, but that the accident had not been reported until Mr. Cuccinello spoke to him Wednesday, but that the personnel had been warned and he assured Mr. Lubetkin it would not happen again. Mr. Lubetkin requested a letter explaining what would be done to prevent a recurrence, and pointed out that a similar type of accident had occurred in 1964. At the conference, Fairchild agreed to pay for the oil clean-up, and subsequently stated they would review plans for furnishing ducks and fish to the City to replace those lost. They also stated that plans are under way to make a modification to the boiler room installation to try and insure that this type of accident would not recur.

Violation & Elimination-Fairchild -Dumont Tubes(continued)

Cleaning operations continued through Friday and Saturday morning, and at approximately 2:00 P.M. Saturday, June 19, the violation was considered eliminated.

Throughout this cleaning operation, River Inspector F. Wendt was assigned to stay at the lake and report if he felt work did not continue diligently.

Mr. Lubetkin continuously kept the Department of Environmental Protection in Trenton informed.

At the conclusion of the work representatives of Fairchild-Dumont presented the City of Passaic with 24 ducks to replace those lost due to this accident.

Violation & Elimination-Borough of Fair Lawn, North Siphon Chamber.

August 30 to September 10, 1971

(L. Cuccinello)

The Borough had to by-pass sewage into the river on August 30 and 31, and again on Saturday, September 4 due to the extreme heavy flow as a result of the storms. It was also discovered that the siphon needed cleaning. A Contractor, Heyrich Pipe Cleaning Company started to clean the line at 10 A. M. on September 8 and completed work at 2:30 P.M. September 10 thus, eliminating the pollution, at that time.

Violations & Elimination-Fair Lawn Water Pollution Control Facilities.

Intermittent

(M. Tomaro)

This activated sludge plant treats an average daily flow of 2.7 million gallons per day and discharges its chlorinated effluent to Saddle River a tributary of the Passaic River. The sludge is digested and dried in lagoons. The licensed operator is Donald Eelman. The Commissioners monitor the discharge from this plant routinely. In 1971 of 51 samples taken, 14 were unsatisfactory as follows:

Jan. 7	High Suspended Solids, Turbidity & B.Coliform
Jan. 11	High Suspended Solids, Turbidity & B.Coliform
Feb. 9	Marginally unsatisfactory, slightly high Suspended Solid
Feb. 17	Marginally unsatisfactory, slightly high suspended solid.
Apr. 22	Very bad-High suspended solids, B. O. D., C. O. D. and turbidity (Plant had mechanical failure of primary system, due to electric motor burn-out)
Apr. 27	Marginally unsatisfactory, High turbidity
May 12	Marginally High Suspended Solids
May 26	Marginally High Turbidity
June 3	Marginally High Turbidity

Violation & Elimination-Fair Lawn Water Pollution Control Facilities. (continued)

June 10 High Turbidity
 June 17 High Turbidity
 July 14 High B. Coliform
 July 29 High C. O. D.
 Sept. 8 High B. O. D. and B. Coliform

Violation & Elimination-The Fashion Center-Adcor Realty Corp.,
 Ridgewood Avenue, Paramus, New Jersey .
 June to October 11, 1971 (M. Tomaro)

This company discharged cooling water into Sprout Brook, a tributary of the Passaic River. Analysis of samples taken indicated it contained chromium. On June 25, Mr. Lubetkin wrote to the company directing them to halt their pollution at once. Mr. Donahue, Manager-Director of the company, called Mr. Lubetkin on June 30, informing him that they were making immediate arrangements to halt the chemical injection into the cooling water supply. He confirmed this in a letter to Mr. Lubetkin, dated July 1, 1971

This violation was eliminated on July 9, by halting all chemical injection. On August 11, they started treatment with Vaporene 88, (a material which had been checked by Passaic Valley Sewerage Commissioners' Lab.). At the end of August a small amount of Chromate Chromium was detected in the effluent (0.34 mg/l). This was again detected on a September 2 sample (0.20 mg/l). It was thought that this was residual chromium in the system and subsequent samples were as follows:

Sept. 9	- 0.20 mg/l	Cr. +++++
Sept. 16	- 0.11 mg/l	Cr. +++++
Sept. 29	- 0.12 mg/l	Cr. +++++
Sept. 30	- 0.08 mg/l	Cr. +++++
Oct. 7	- 0.04 mg/l	Cr. +++++

The amount of Chromium was decreasing at the time of shut down of air conditioning system on October 11. This will be monitored again in the spring of 1972 when the system is again activated.

Violation & Elimination-Field's Plastic and Chemicals, Inc.
199 Garibaldi Avenue, Lodi, New Jersey.
January to June 30, 1971 (J. Perrapato)

This company discharged a large volume of warm cooling water into Millbank Brook, (a tributary of Saddle River). Measurements indicated that the discharge raised the temperature of the stream from 30° to 40°F during the cold weather.

Mr. Lubetkin, together with Mr. L. Cuccinello met with and discussed the problem with Mr. Jerry Napolitano, Sr., on January 20, 1971. Mr. Napolitano, agreed to make changes in his internal piping to recirculate this water thus halting the thermal pollution. He said he would write a letter to the Commissioners explaining what he would do. As of the end of January, no letter was received by the Commissioners.

On February 9, 1971, Mr. Lubetkin wrote to this company explaining that they were guilty of thermal pollution, and directing them to cease. On February 12, Mr. Schnur, Vice President, wrote asking for a clarification of "thermal pollution", and stated that they were seeking means of recirculating the water and steam presently being discharged. He stated that as soon as he gets bids and time estimates, the Commissioners would be informed, but that it appeared that it would take six months for proper repiping. On February 17, Mr. Lubetkin replied, explaining what thermal pollution was, and also stating that the six months was satisfactory, provided that written monthly progress reports were submitted to the Commissioners on or before the end of each month, the first one to be due March 31, 1971. On April 2, 1971, Mr. Schnur wrote to the Commissioners, stating that they received on March 30, a proposal for the collection of condensate return. The proposal called for work to be completed eight weeks from signing of the contract.

Since no further reports were recieved, and since the pollution continued, Mr. Lubetkin wrote to the company on May 26, requesting a report prior to the end of May.

On June 15, Mr. Lubetkin received a letter from Mr. Schnur, stating that no written report had been submitted, insomuch as oral reports had been given to Inspector J. Perrapato. Mr. Schnur then went on to report that most of the work was complete for collecting condensate returns and repiping this material to the boilers, and he expected work to be completed within 2 to 3 weeks. The Inspector reported that discharge of all steam to Millbank Brook had stopped. Mr. Lubetkin wrote to Mr. Schnur on June 17, explaining why written reports were necessary, even though verbal reports are given to the Inspector.

On June 20, Inspector J. Perrapato reported that his measurements of Millbank Brook temperatures indicated that the elimination of the steam discharge, etc. had eliminated the thermal pollution.

Violation & Elimination-Fine Organics, Inc. 205 Main
Street, Lodi, New Jersey
April 23-30, 1971

(J. Perrapato)

Lodi Brook discharges into Saddle River in Lodi at the base of the small dam. Recently polluting matter was noticed being discharged through this outlet to Saddle River by Mr. Lubetkin. On April 23, Mr. Lubetkin, together with Mr. J. Perrapato and W. Fleming of the Commissioners' Sanitation Control Department met with Mr. G. Renken, Plant Engineer, of Fine Organics, Inc., to attempt to trace the source of this pollution. Mr. Renken was extremely cooperative, helping to lift manholes and showing the in-plant connection to the Commissioners' personnel. A dye test revealed that one outlet which drained a low part of the plant plus steam condensate, and had potentially polluting material, was connected to Lodi Brook. When informed of this Mr. Renken agreed to reconnect this to the sanitary sewer. This was completed as of April 30, 1971.

Violation & Elimination-Fisher Scientific, Nevins Road,
Fair Lawn Industrial Park, Fair Lawn, New Jersey.
October 8, 1971

(T. Costello)

Leak

A line from a storage tank containing phosphoric acid started to leak at about 12:30 P.M. on October 8. The resultant spillage on the ground was hosed into a yard storm drain which led to Henderson Brook (a tributary of the Passaic River), through a 10 inch storm sewer.

When informed by Inspector T. Costello that this was illegal, plant Manager, J. Phillips promised to reprimand employees and to take steps so as to prevent this from happening again.

Violation & Elimination-Fluid Chemical Co., 878 Mt. Prospect
Avenue, Newark, New Jersey.
September 10 to 16, 1971

(R. Goldstein)

Leak

On Friday, September 10, 1971, Mr. L. Cuccinello and Mr. Fleming noticed a heavy accumulation of foam along the banks of Second River. They traced the pollution to Fluid Chemical Company and was told that on Wednesday, September 8 a storage tank on the roof of the building containing 500 gallons of a stop-leak fluid had spilled into the yard and run along the railroad ditch and into the river. Mr. James Emman, maintenance manager promised to clean the remaining material from the ditch by Monday or Tuesday. Mr. Lubetkin wrote to this company on September 14, asking for a report on this matter. No answer was received. However, the R.R. ditch was cleaned by Thursday, September 16, 1971.

Violation & Elimination-Franklin Construction Company,
Great Notch, New Jersey.

(A. Dondero)

The Franklin Construction Company has a contract with the Department of Transportation on constructing part of Route 21 Freeway through Passaic and Wallington. This construction includes relocating part of the Passaic River and has caused much pollution and turbidity in the River during this relocation. In addition pollution was caused by a series of sewer breaks in Passaic as follows:

February 1-3, 1971.

While excavating in the rear of the Passaic Y. M. C. A., in December, a crane broke a 6" City sanitary sewer. It was immediately temporarily repaired so no significant pollution occurred. This temporary pipe was broken on February 1 and sewage went into Passaic River. The pipe was finally repaired on February 3, 1971, thus eliminating pollution.

August 2-4, 1971

The combination of rain, soft ground, and construction work by the Franklin Construction Company on the Route 21 Freeway caused a cave-in of Main Avenue at the intersection of Paulison Avenue, Passaic, which allowed sewage to discharge to the Passaic River through the Paulison Avenue Storm Drain. Franklin Construction Company made repairs. Pollution was halted as of 3:00 P.M., on Wednesday, August 4.

August 17, 1971

On August 17, while excavating the west slope of Weasel Brook, the operator of a back hoe punctured an oil tank which was in the ground. It was estimated that about 75 to 100 gallons of #4 oil flowed into Weasel Brook, thence to the Passaic River.

September 12 to 15, 1971

This 18" sewer at Paulison Avenue and Main Street broke again on September 12. Franklin Construction Co., the contractor for the New Jersey Department of Transportation, again made repairs to this sewer.

The City of Passaic wrote to the Commissioners on September 22 concerning this matter. They feel that the sewer line may have been damaged at other locations and desire a future inspection by the State before the contractor is released. The City of Passaic requested the intercession of the Passaic Valley Sewerage Commissioners in this matter.

Violation & Elimination- Franklin Construction Company
(continued)

October 13-15, 1971

On Wednesday, October 13, the Passaic Sewer at Paulison Avenue and Main Street again failed due to the construction of the highway in this area. The Franklin Construction Company started to make repairs immediately. They installed three lengths (four foot each) of 18 inch tile pipe and completed the work on Thursday, October 14 at 11:00 A. M.

At that time, two leaks at pipe joints at another location was discovered. Repairs on this were finally completed, October 15, thus halting pollution.

Mr. Lubetkin wrote to the Department of Transportation to discuss this matter and other matters. A conference was held for October 21, 1971, but the Department of Transportation only stated that any damage done by the Contractor would be repaired by the Contractor. (See also Violations & Eliminations-City of Passaic - Page 103).

Violation & Elimination-Garden State Paper Co., Garfield,
New Jersey.

Intermittent to July 9, 1971

(J. Perrapato)

Intermittent pollution from this company occurred due to accidental spills and poor housekeeping. When previously informed of this matter, many corrective steps were taken such as regarding, reconnecting certain areas to the sanitary sewer, etc.

On September 24, 1970, Mr. Lubetkin wrote to this company, informing them that work done to date on eliminating this problem had been inadequate, since three of the last four samples were polluting. Mr. Lubetkin requested information on what further steps would be taken to halt this pollution, and a time table showing when it will be accomplished.

On October 20, 1970, Mr. Finnegan, Plant Manager, wrote to the Commissioners giving Mr. Lubetkin details as to what had been done, such as further regrading, periodic cleanups, repiping and sampling. He also stated that the sewer at the chemical tank filling area will be divorced from the storm sewer at the time of the installation.

Mr. Lubetkin, on June 22, wrote to Mr. Finnegan, since this work was not done, requesting to be brought up-to-date on what is being done to halt this intermittent pollution. On June 30, Mr. Finnegan replied that a dike will be built around the chemical tank area so that any seepage or spill will be contained on the concrete pad which is pitched to the mill sewer drain, which will go to the sanitary sewer.

Violation & Elimination-Garden State Paper Co., (continued)

The work was completed July 9, by Contractor Smith Soudy of Wallington, thus eliminating this source of pollution. Inspector Perrapato reported quantities of fish swimming in the river near this outlet.

September 29, 1971

At 2 A. M. on Wednesday, September 29, a float valve stuck on a "white water" tank and an overflow occurred, which ran to a catch basin, thence to the river. The spill was detected after about one hour. To prevent a recurrence of this type of pollution, the overflow line was reconnected to the sanitary sewer.

October 18, 1971

At 11:00 A. M. on October 18, the Commissioners received a call about an accidental spill of caustic soda, caused by a faulty pump, which went to a storm drain, thence to the Passaic River. The flow was stopped about 1:00 P.M., the same day. The overflow line was subsequently connected to the sanitary sewer so that there would not be a repeat of this.

On October 18, plant manager D. Finnegan, wrote to the Commissioners that, in spite of improvements made in the mill yard, spills from their system occasionally flow to the storm sewer. They were requesting their consulting engineers to prepare drawings to divorce the yard drains from the storm system and install them into the sanitary system. They said they will contact the Commissioners as soon as a contractor is selected.

As of the end of 1971, no letter has been received from this company concerning any work on yard drains, however no pollution has been reported since October 18, 1971.

Violation & Elimination-Glerum Concrete Corp., 195 Sargent Avenue, Clifton, New Jersey.

December 1970 to June 1, 1971

(R. Goldstein)

Washings from trucks were running into the Athenia Storm Sewer thence to Weasel Brook. A sample taken December 10, 1970, was analyzed and found to be highly polluting. Mr. Arts of the company was informed by the inspector of this violation. He told the inspector that he would make arrangements to remove this waste from the storm sewer.

Although the plant ceased operations on December 16, for the winter, Mr. Lubetkin wrote to them, informing them of the previous violation and requested information on what would be done to halt this source of pollution prior to resumption of operation in April, 1971. On January 11, Mr. P. Arts of this company wrote asking for further information on the violation. Mr. Lubetkin responded on January 14. On January 25, Mr. Arts, wrote stating they had engaged a chemist to investigate and advise a proper course of action. They expected answers in a few weeks.

Violation & Elimination-Glerum Concrete Corp., (continued)

As of June 1, 1971, this company boxed in the plant area and is recycling the liquid discharge into the mixer trucks.

Violation & Elimination-Globe Products, Inc., 55 Webro
Road, Clifton, New Jersey
September 30 to October 21, 1971 (F. Wendt)

Inspection by Supervisor L. Cuccinello, Ass't. W. Fleming and Inspector F. Wendt revealed poor housekeeping in the yard area of the above company. Drippings of food products were evident throughout the yard and truck area. Rains caused these food remnants to be washed into MacDonald's Brook, a tributary of the Passaic River.

Mr. Judson Merl, plant manager was contacted and he advised the inspectors he would clean the yard immediately. Mr. Merl wrote to Mr. Lubetkin on October 5, confirming his discussion with Passaic Valley Sewerage Commissioners' personnel and reporting the implementation of the following:

- (1) Washing all empty barrels and drums prior to yard storage.
- (2) Prevention of trailer truck wash-down in yard.
- (3) Washing all empty pallets prior to yard storage.
- (4) Improved yard housekeeping.
- (5) Immediate expediting of garbage compactor breakdowns.

Inspector Wendt reported that an inspection made by him on October 21, showed that the above had been accomplished.

Violation & Elimination-Hess Oil Company, West Fort Lee
Road, Bogota, New Jersey.
May 21, 1971 (L. Tateo)

Inspector L. Tateo, together with Superintendent L. Cuccinello, and W. Fleming discovered an oil spill (Bunker C oil) caused by a delivery truck overfilling the tank of the Hillcrest Piece Dye Works, 85-5th. Avenue, Paterson, New Jersey, which went toward a catch basin.

Superintendent Cuccinello directed the driver to contact his company at once. Representatives of the company came and applied an absorbent to the oil, and the residue was trucked away, eliminating the pollution.

Violation & Elimination-J. I. Hoss Company, 859 Communipaw Avenue, Jersey City, New Jersey.
August 31, 1971 (J. McLaughlin)

A reddish orange color was traced back to the Pulaski Skyway Bridge by Inspector J. McLaughlin. The J. I. Hoss Co., a painting contractor, was painting this bridge. Mr. James Papas, Supervisor, informed Mr. McLaughlin that a vehicle hit a 30 gallon drum of paint which spilled into the river. Mr. Papas showed Mr. McLaughlin drop cloths secured below the painting area to catch splatterings, but the above pollution was an accident.

Violation & Elimination-Imperial Electro Plating Co., Inc., 50-52 Park Avenue, Lyndhurst, New Jersey.
November 11 to December 29, 1971 (F. Cupo)

A sample taken by Inspector Cupo at Park and Lake Ave., (discharging into the Lake Avenue Storm Sewer) contained a large amount of iron oxide. This was traced by the inspector back to the Imperial Electro Plating Company.

On November 16, a sample was taken of the discharge from this company and analysis confirmed pollution. The waste was acid (pH 3.6) and a C.O.D. of 100.

Mr. Lubetkin wrote to this company on November 23, informing them of the pollution violation and directing they cease pollution at once.

Mr. Cupo met Mr. G. Dotoli, General Manager, on November 24, and was informed that carelessness in his back-Yard had caused oil and iron chips to get into the storm sewer.

Mr. Cupo inquired about a 3'x3' pit located in front of the property which was covered with a heavy plate and was therefore not visible. Mr. Dotoli said he had covered a storm outlet that had been sealed. At Mr. Cupo's request the plate was removed and it was discovered that the pipe was not sealed.

On November 30, Mr. Cupo, Mr. Cuccinello and Mr. Fleming visited this company at 10:30 A. M. They had the plate lifted and took a sample of the discharge which flows into the Lake Avenue Storm Sewer. This was analyzed and found to be polluting.

On December 8, Mr. Lubetkin wrote to Mr. G. Dotoli and informed him of the pollution and directed him to take whatever steps are necessary to halt this pollution.

Violation & Elimination-Imperial Electro Plating Co., Inc.,
(continued)

Mr. Dotoli, informed the inspector that he would plug the line to the storm sewer and had ordered a plug. Meanwhile samples taken December 9 and 15 confirmed continued pollution.

Mr. Lubetkin requested Chief Counsel Segreto to write to this company, which he did on December 20, informing the company that if a satisfactory reply is not received by the Commissioners by their December 29 meeting, the matter would be referred to suit without further notice. A sample December 21, was still polluting.

On December 23, Mr. G. Dotoli wrote the Commissioners that they were waiting for the necessary material and feel that by December 31, or sooner the problem will be corrected.

On December 29, at 9:45 A. M., Supervisor L. Cuccinello inspected this plant and found the pipe sealed with an 8" cap., thus no flow could reach the storm sewer from this pit.

On December 30, Mr. Dotoli wrote to Mr. Lubetkin, informing him of the steps taken to eliminate the pollution and thanking the Commissioners for their cooperation and courtesy.

Violation & Elimination-Inmont Chemical Corp., 150 Wagaraw
Road, Hawthorne, New Jersey.
January 6, 1971 (T. Costello)

Inspector T. Costello traced green in the Passaic River to this plant. He found that heavy rain washed material from old fiber & steel drums containing residue dye into storm drains. Sodium Hypochlorite was used to bleach residue dye in the storm ditches.

The company removed the drums and promised in the future they would be stored in a protected area.

In addition to the above, a pump in their pretreatment system failed. The maintenance foreman pumped the overflow to the storm system by mistake, contributing to the River problem. When this was pointed out they halted pumping immediately, and repiped the pump to the sanitary system.

March 22, 1971.

Inspector, T. Costello, traced oil in a storm ditch to this company and to a leaky oil pump. When the plant engineer was informed of this, he immediately switched to a stand-by-pump until leaky pumps could be repaired, thus eliminating pollution.

June 15, 1971.

At approximately 10:00 A. M. on June 15, 1971, while transferring filter press boxes of flourescein from one building to another, some of the dye fell to the ground and heavy rains

Violation & Elimination-Inmont Chemical Corp., (continued)

washed the dye into yard drains, which thence emptied to the storm ditch, which, in turn discharges into the Passaic River. The company attempted to bleach the area, but green color was visible along the river banks approximately 1,000 ft. down stream. The color disappeared by 3:00 P. M. the same day.

Violation & Elimination-International Paint and Circuits, Inc., 135 Manchester Place, Newark, New Jersey.
August 24, 1971 (R. Goldstein)

On August 24, Inspector R. Goldstein traced a liquid with detergents, which was entering a catch basin in Mill Street, to the above company. This material went from the catch basin to Second River. Mr. Goldstein reported that a broken line at the plant was spilling about 10 gallons per minute to their yard which ran down a railroad ditch to Mill Street, thence to the catch basin. When informed of the violation, the flow was shut off and pumped by hose to a sanitary sewer, thus halting the violation.

On September 1, Mr. Lubetkin wrote to the company, informing them that the hose and pump was a temporary measure until the pipe could be repaired.

As of September 16, repairs to the broken sanitary line were made by the Fairfield Plumbing Company.

Violations & Eliminations-Borough of Lodi, Hendrick's Pump Station.
Intermittent from Jan., 1969 to May 24, 1971 (J. Perrapato)

In 1969, failures of pumps and electrical equipment in the Hendrick's Pump Station allowed intermittent overflows to Saddle River. The Commissioners requested that the Borough install a spare pump and repair and install electrical equipment, so that breakdowns would be less frequent, and, when they occurred, there would be no overflow to the river. When the Borough failed to act on this request, the Commissioners took legal action, and a Judgment was entered, on December 3, 1969, requiring the Borough to make the requested changes. The Court gave the Borough 12 months to implement the order.

Since no work had been started on this project, Mr. Lubetkin wrote to the Borough on August 5, 1970, informing them of the intermittent overflows and directing them to halt this pollution. On August 6, Mr. Gasalberti, Borough Manager, called Mr. Lubetkin and explained he was trying to get various industries in the Borough to finance the necessary work, and this was delaying the matter.

Violation & Elimination-Hendrick's Pump Station (continued)

On August 24, Mr. Lubetkin again wrote to Mr. Gasalberti, pointing out that the time allowed in the Judgment was passing, and requested an immediate progress report. On August 25, Mr. Gasalberti, submitted copies of correspondence to various industries, and stated that there was to be a meeting of the Mayor and Council on September 8, and that a resolution would be introduced to appropriate emergency funds for this project.

Since at their Council meeting of September 8, the resolution appropriating funds for this work was not passed, Mr. Lubetkin wrote again on September 14, asking to be informed of the present schedule to conform with the Court Order. Mr. Gasalberti telephoned and said he would get the information from the Engineer on time of installation, and forward this to Mr. Lubetkin as soon as possible. However, the Commissioners did not receive this information from the Borough. Inspector Perrapato reported that at a special meeting on October 19, 1970, money was finally allocated for the repair work.

Mr. Segreto, the Commissioners' Chief Counsel, wrote to the Borough of Lodi on November 5, 1970, and Mr. Gasalberti replied to him on November 16, stating that bids for renovating the Hendrick's Pump Station would be received on December 7. Contracts were awarded on December 9, to Burrows Well Drilling Co., Inc., to furnish and install a 2,500 g.p.m. pump and appurtenances, and to H. Stamato, Inc., to furnish and install new control equipment for the entire pumping station.

Since no work was visible to the Inspector, Mr. Lubetkin wrote to Mr. Gasalberti on January 20, 1971, asking for an up-to-date progress report indicating when the work would be completed. No reply was received by the Commissioners.

Mr. Lubetkin again wrote to the Borough of Lodi on February 18, concerning this matter, and received a reply dated February 23, informing the Commissioners that the delivery date of the control equipment had not been ascertained.

The pump was delivered at the end of March and installation started. As of Friday, April 23, the new automatic float control was installed. Mr. Lubetkin, when inspecting the installation on April 23, was told that the motor, which was to connect to the third pump, was not operable and it was not in the contracts to repair it. Mr. Lubetkin wrote to Mr. Gasalberti on April 26, informing him that a pump without a motor would not do the work intended. As of April, no reply had been received from Mr. Gasalberti, but Inspector Perrapato reported that the motor had been removed for rewiring.

Borough of Lodi, Hendrick's Pump Station- (continued)

On April 21, the old float mechanism failed and an overflow of polluting material from this station to Saddle River occurred. This was halted shortly and the new float installed.

On May 24, Inspector Perrapato reported that the third motor was installed thus completing the work only 5 1/2 months late, thus eliminating this source of pollution.

July 23-26, 1971

On Friday, July 23, Inspector Perrapato noticed a slight overflow from the sump pit located east of the Hendrick's Pump Station. Mr. Della Penta, of Lodi was contacted and he arrived at this site with a crew of men and attempted to clean the partially clogged sewer. The attempt was only partially successful and Mr. Della Penta contacted the Borough Manager, R. Gasalberti, about possible further work when the sewer was low.

Inspector Perrapato reported that no overflow occurred during Saturday and Sunday, July 24 and 25.

On Monday, July 26, Mr. Lubetkin received a call from Mr. Perrapato about this pollution. Mr. Perrapato explained that he did not contact Mr. Lubetkin, Friday as he thought things were under control, however, he found out that a bad overflow into Saddle River was occurring this morning. Mr. Lubetkin called Mr. Gasalberti and explained the seriousness of the situation. Mr. Gasalberti told Mr. Lubetkin he had just been informed of the situation. It was his understanding that nothing could be done until the next weekend when the flow was low enough. Mr. Lubetkin told him the flow would be low enough at night and Mr. Gasalberti agreed to cooperate and work during the night if necessary to clean the blockage. Mr. Lubetkin wrote a letter confirming the conversation. Mr. Lubetkin also requested that in the event they were unsuccessful in removing the blockage that night, that temporary pumps be installed to halt pollution of Saddle River. However, in actual practice, Mr. Della Penta, succeeded in clearing the blockage, thus halting the pollution, by 3:30 P. M. on July 26, 1971.

August 7, 1971

The Borough of Lodi's sewer department raised the overflow level in the wet well before the Hendrick's pump Station 42 inches on Saturday, August 7. This was to prevent pollution of Saddle River during short-time very high flows (industrial dump periods).

August 27 to 30, 1971

On Friday afternoon, the combination of the storm Doria, the high river, and incomplete construction work around the Wallington Pumping Station caused problems at that station. Since it became impossible to pump the flows through that station with the head generated by the Lodi station, the Borough of Lodi was

requested to by-pass its flow to the river for a short time.

When the line could take the flow again (later Friday), the stations were unable to resume operations because the high Saddle River had flooded the station, causing loss of power.

The stations resumed operation 6:00 P. M. on Sunday, August 30.

September 9 to 30, 1971

Due to flooding the Hendrick's Pump Station was out of operation from September 9 to September 15. On September 15 only one of the three pumps could be put back as the flood had damaged the two remaining motors. The one pump halted the major pollution but by-passing still occurred during peaks when the load was too great for one pump.

On September 17, Mr. Lubetkin called Mr. Gasalberti to remind him that the pumping station was not fully operative and everything possible must be done to make the necessary repairs. This was confirmed in a letter dated September 17. As of the end of the month the second pump was repaired, thus eliminating the violation. They expected to have the third stand-by pump repaired early in October.

During the storm, flooding also occurred to the Meta Lane Pumping Station and three chemical plants on the bank of Saddle River (Mallincrodt, Lemke, and Fine Organics).

As of the end of 1971, the third stand-by pump in the Hendrick's Pump Station still had not been installed.

Borough of Lodi, Home Place Pumping Station

June 23, 1971

(J. Perrapato)

A call was received at the Commissioners' Wallington Station from an unidentified person complaining of sewage being pumped into Saddle River. Inspector Perrapato was sent to Home Pl., and arriving at 9:15 A. M., found the Lodi Sewer Department pumping sanitary sewage from a manhole because of a clogged pump at the Home Place Pumping Station. Inspector Perrapato directed they halt this pollution.

At approximately 10:30 A. M. they were able to get the pump at the Home Place Pumping Station operating.

Borough of Lodi, 16" Industrial Sewer Break. Page 97
June 16-19, 1971 (J. Perrapato)

At approximately 10:00 A. M. on June 16, 1971, Inspector J. Perrapato noticed a break in the 16" sewer running from the Fabien Company to the Hendrick's Pumping Station. Mr. Perrapato contacted Mr. Gasalberti, Manager of the Borough of Lodi, who sent Mr. Della Penta, Sewer Foreman, to the site. Mr. K. Job, Borough Engineer, arrived and spoke to Mr. Lubetkin. Mr. Lubetkin requested Mr. Job make arrangements to pump the sewage around the break in order not to pollute Saddle River during the repair. Mr. Job agreed to build a sump with a dirt dam and pump the material to the Hendrick's Pumping Station approximately 150 feet away.

The dirt dam and excavation was completed at about 4:45 P. M. the same day.

Since no work on repairing the break had been started by Friday afternoon, June 18, Mr. Lubetkin wrote to the Borough explaining that the dam was only a temporary structure, and the Commissioners desired the repair to be completed as soon as possible. Work started late Friday and continued all day Saturday (June 19), until the repair was completed at approximately 3:00 P.M. Supervisor of River Inspection, L. Cuccinello, and Ass't. Chief of River Inspection, W. Fleming, stayed with the job Saturday, and Inspector Perrapato rechecked the job on Sunday to see that no leaks developed.

Borough of Lodi, Meta Lane Pumping Station..
May 25, 1971 (J. Perrapato)

Superintendent Cuccinello received a call from Mr. R. Demczyszyn at 2:00 P.M., stating the Millbank Brook was running green. Superintendent Cuccinello, together with W. Fleming, investigated and traced the pollution to the Meta Lane pumping Station in Lodi, which was by-passing sewage into Millbank Brook, due to a pump breakdown. Repairs to the pump were completed by 5:00 P. M., however, a backup of colored material in the meadows took several days to clear.

Violation & Elimination-Lord and Taylor, Route 17,
Paramus, New Jersey.

June 30 to October 11, 1971

(M. Tomaro)

A sample taken of the cooling water on June 30, 1971, discharging to Sprout Brook was analyzed and found to be polluting. The company was verbally notified that the additive used by them to the cooling water, containing zinc, was polluting and should be changed.

This was confirmed in a letter to them, dated July 7. On July 13, Mr. G. Cavin, P.E. replied to Mr. Lubetkin, that their water treatment consultants were to supply a non-polluting water treatment and he asked for details of the analysis so that corrective action could be taken. On July 16, Mr. Lubetkin replied that their discharge contained a C.O.D. in excess of 100 mg/l and also zinc in the amount of 2 mg/l both of these items were unacceptable. Mr. Lubetkin subsequently received a copy of a letter from Metropolitan Refining Co., Inc. suggesting a Vaporene 88 as a corrosion and scale inhibitor and submitting data to the Passaic Valley Sewerage Commissioners. After analysis, Mr. Lubetkin wrote that Vaporene 88 was unacceptable because of low pH value (namely pH of 4.2) and a C.O.D. too high at the proposed dilution.

Subsequently, Mr. Lubetkin received a call from Mr. T. Balke of the Technical Department of Metropolitan Refining Co., Mr. Balke was told that the pH had to be between 6.5 & 8.5 and the C.O.D. below 100 mg/l. Mr. Lubetkin was informed that at the dilution of one quart per 1000 gallons, the C.O.D. would be satisfactory and with the alkaline water would indeed result in a pH between 6.5 and 8.5. Mr. Cavin wrote to Mr. Lubetkin on July 23, regarding confirmation of approval with the changes. Mr. Lubetkin replied on July 29, that Vaporene 88 could be used and the Commissioners would sample the results. If the resultant water is outside the pollution limits further changes would be required.

Use of Vaporene 88 was started August 13, and a sample taken August 18 was satisfactory. A sample taken on August 26 contained a small amount of chromium, but this was considered residual material which had adhered to the walls and the violation was considered eliminated.

However, samples taken September 2, 9, 16, 29 and 30 still showed small amounts of chromium, (0.1 mg/l). This may have been residual Chromium, but the Commissioners still considered this polluting. It was even more puzzling when we realized that this company had not used Chromium for a year having switched to Zinc in April 1971 at the start up of the cooling season. The system was closed down at the end of the cooling season on October 11, 1971. It will be monitored at their start-up in April, 1972. Mr. Lubetkin wrote them a letter on October 13, suggesting that they clean and purge the system during shut down.

Violation & Elimination - Town of Lyndhurst, Lake Avenue Storm

sewer.

December 1970 to December 28, 1971

(F. Cupo)

Samples taken of the discharge of the Lake Avenue storm sewer into the Passaic River were analyzed and found polluting.

Mr. Lubetkin wrote a letter to the Town of Lyndhurst, Department of Public Works, on December 21, 1970, directing them to determine the source of pollution and have it halted at once. When no reply was received, Mr. Lubetkin again wrote to the Town on January 20, 1971. Commissioner Janowski called Mr. Lubetkin, stating he thought an answer had gone out and he would reply immediately. The Commissioners received a letter dated January 29, 1971, describing an ordinance which was passed on April 16, 1970, restricting connection to the public sewer system. He stated that they had cited one industrial firm in the Lake Avenue area, and corrections were made at this location. He also stated eye tests would begin that week to determine sources of pollution.

Pollution continued, therefore, on May 26, 1971, Mr. Lubetkin again wrote to Commissioner Janowski, explaining that pollution was a serious matter and requesting an immediate reply explaining what was being done by Lyndhurst to halt the pollution.

Various samples were taken with a view of locating the source of pollution with most of the trouble seeming to be coming from S. B. Penick.

During October 1971, S. B. Penick eliminated their violation (See S. B. Penick page 104) but samples of this storm sewer during November 1971, still showed pollution. This was traced back to the Imperial Plating Company, Mr. Forte of the Town of Lyndhurst was notified of this pollution. On December 28, Imperial Plating Company, eliminated its pollution, (See Imperial Plating Co., page 41) and a sample taken of the Lake Avenue Storm Sewer on that day showed no further pollution.

Violation & Elimination - Martin's Cities Service Station, 1 Bel-
grave Drive, Kearny, N.J.

August 24, 1971

(J. Colello)

On August 24, at 4:10 P.M., two men employed at this station were seen dumping oil into the storm drain in front of their station. Inspector Colello was assigned to get the facts. He spoke to Mr. Martin at 9:30 A.M. on August 25, and was informed that the oil holding pit had clogged and the oil was bailed out to get at the line for cleaning. The used oil was hauled away, and he promised never to repeat the oil pollution.

Mr. Lubetkin wrote to Mr. Martin on September 1, confirming the inspector's warning, and requesting a written reply as to the usual method of oil disposal.

Although, Mr. Martin did not reply, Inspector Colello investigated and reported that the used oil was picked up by Bay City Oil Reclaimers of Kearny, New Jersey.

Violation & Elimination - McLean Motor Express Company, Paterson

New Jersey

September 28, 1971

(L. Tateo)

Due to brake failure on a tractor cab at Route 20, near Seventh Avenue on Tuesday, September 28, the tractor jumped the divider, crushing the fuel tank. Approximately 30 gallons of diesel oil spilled on the road and was washed into the storm sewer by the City Fire Department.

Violations & Eliminations - City of Newark

Brown Street Sewer

Polluting to April 23, 1971

(J. McLaughlin)

The City of Newark constructed a new sewer in Albert Street and connected all industrial outlets that were connected to the Brown Street Sewer to the new Albert Street Sewer. During April the end of Brown Street Sewer at Lister Street was sealed so that no waste from the City could reach this sewer. The sewer now only drains storm water from the Sherwin Williams Company. Observations by Inspector McLaughlin from April 19, to 26, indicated no discharge from this pipe. The pollution has been eliminated.

Elavan Avenue Storm Sewer

August 6 to 13, 1971

(J. McLaughlin)

On Friday, August 6, at 4:00 P.M., Mr. Smith of Smith's Boat Yard, 33 Riverside Avenue, Newark, complained about a discharge from the Elavan Avenue Storm Sewer to Inspector McLaughlin. Mr. McLaughlin attempted to call Newark's Dept. of Public Works, but no action was taken by the City; therefore, the pollution continued over the weekend. Mr. McLaughlin again called on Tuesday, August 10.

Mr. Lubetkin received the report on Thursday, August 12, and immediately called Mr. R. Altiero. Mr. Altiero stated he would try to get the crew out immediately to halt this pollution.

On Friday, August 13, at 11:00 A.M., a City of Newark sewer crew, headed by Gus Ciccone, Foreman, arrived and started to remove a blockage located approximately 60 ft. east of a manhole at the foot of Elavan Avenue. Work was completed at 1:30 P.M., thus halting pollution.

Violation & Elimination - North Arlington - Crystal Street Storm

Sewer.

September 14 to 20.

(F. Cupo)

This storm sewer overflowed during the storm of September 12, and continued to overflow after the rain had subsided. Investigation by Inspector F. Cupo, revealed a blockage in the sanitary line causing overflow to the storm sewer. A contractor was hired by the Borough of North Arlington, and he cleared the blockage, thus eliminating the pollution.

Violations & Eliminations - Northwest Bergen County Sewer Authority, 50 No. Franklin Turnpike, Ho-Ho-Kus, N.J. (Office)
Intermittent (T. Costello)

This activated sludge sewerage treatment plant located in Waldwick, is designed for 8.5 million gallons per day and serves the municipalities of Allendale, Ho-Ho-Kus, Midland Park, Ramsey, Waldwick and Wyckoff. Since the discharge of its effluent (approximately 3 M.G.D., at this time) is into Ho-Ho-Kus Brook, a tributary of Saddle River, and hence Passaic River, it comes under the jurisdiction of the Passaic Valley Sewerage Commissioners and is therefore monitored by Commission personnel. The licensed operator is George Bayer.

The Commissioners have written to the Authority on December 6, 1971, requesting copies of their monthly report to the state. As of the end of the year, no reply had been received nor had any reports been received.

Of the 50 samples taken by the Commissioners, 12 were unsatisfactory as follows:

January 7 and 11, unsatisfactory turbidity, B. Coliform, Mr. Bayer, reported that breakdown of incinerator caused a back-up of solids, upsetting plant.

May 6, high suspended solids, C.O.D. and turbidity.

May 19, high B. Coliform

May 26, high B.O.D.

July 29, high C.O.D.

August 26, high B. Coliform

October 6, high B.O.D., B. Coliform

October 13, high C.O.D., suspended solids and turbidity

October 20, high C.O.D., and turbidity

October 28, high B. Coliform

November 4, marginal C.O.D. and B. Coliform

Violation & Elimination - Nylok Fastener Division, USM Corporation, 611 Industrial Avenue, Paramus, New Jersey.
May 10 to 12. (M. Tomaro)

On May 10, Inspector M. Tomaro saw a milky substance in Sprout Brook, off Route 17, near Ridgewood Ave., Paramus. Mr. Tomaro traced this material to the Nylok Fastener Division of USM Corp., and spoke to Richard Smith, Engineer of the company.

Upon touring company property with Mr. Smith, they came across a pipe discharging this material into a small pit which was piped to a storm drain.

The white substance was a cleaning solvent from a parts' washer that operates approximately 2 hours daily. The operation was halted immediately and by May 21, Mr. Tomaro's next inspection, the washer had been reconnected to the sanitary sewer thus eliminating the violation. This was confirmed at the request of Mr. Lubetkin in a letter dated May 20, from Mr. T. E. Butler, Manager of the Paramus Plant

Violations & Eliminations - Town of Nutley

Nutley-Belleville Storm Sewer
March 10 to April 7, 1971

(D. Miele, Jr.)

During March, the Commissioners' samples indicated pollution of the Nutley-Belleville Storm Sewer, but it was not until the beginning of April that the source was located. A dye test in the Hancock Avenue sanitary sewer in Nutley was traced to the Storm Sewer. Mr. Lubetkin wrote to the Town of Nutley and on April 7, a blockage in the sanitary sewer, which caused an overflow to the storm sewer was cleared, thus eliminating the pollution.

May 19, 1971

(D. Miele, Jr.)

Inspector D. Miele, Jr., saw a gray discharge coming from the Nutley-Belleville Storm Sewer. He called the Department of Public Works, Town of Nutley at 10:05 A.M. The Department of Public Works crew found a blockage in the Hancock Avenue Sewer near the entrance to the Sonneborn Corporation. The blockage in the sanitary sewer was causing an overflow into the storm sewer. The blockage was cleared at 11:55 A.M., thus eliminating the pollution.

Violation & Elimination - Panatomic Engraving Company, Main Street
Borig Place, Lodi, New Jersey
June 14, 1971

(J. Perrapato)

At 4:00 P.M. on June 14, Mr. John Lascari called L. Cuccinello, Supervisor of River Inspection and reported that he saw oil slicks in Saddle River. Inspector J. Perrapato was sent to check. As Inspector Perrapato worked his way down Saddle River, he noticed the oil slicks as he neared Borig Place, Lodi. He walked along the river bank and found that they appeared to start at the back of the Panatomic Engraving Company. Closer inspection of this company, with the back of their building on the river bank, revealed that a 1/4" copper fuel line leading into the back of the building was dripping oil, which slowly worked its way to Saddle River.

Mr. G. Merlino, Plant Manager, was informed of the problem (about 3:30 P.M.). Mr. Merlino had his men repair the line (about 6:00 P.M.). Mr. Merlino had his men, at Inspector Perrapato's request, remove the oily soil the following morning.

Violation & Elimination - Parra Print, Inc., 35 Eight Street,
Passaic, N.J.
December 9 to 10, 1971

(F. Wendt)

This company is located in the Passaic Pioneer Property Complex and has one of the outlet sampled by the two Newark College of Engineering Students, Mr. T. Cassera and Mr. A. Reilano. Their report given to Mr. Lubetkin on December 8, indicated a pollution from this company. Inspector F. Wendt was sent to investigate and he discovered polluting material discharging from a one inch pipe from the Parra Print, Inc., building going into the Passaic River. The plant manager, D. Burnett was informed and he immediately made arrangements to plug the line with concrete and discharge the material to the sanitary sewer. This was completed by December 10, 1971.

Violations & Eliminations - City of PassaicStreet Sewer

June 4 to 17, 1971

(A. Dondero)

Odor was noticed by the Commissioners' Construction Inspector, Dondero, near a culvert under excavated by Franklin Construction Company, (working on Route 21 for the State Highway Department), but he thought it was part of excavated muck. Mr. D. Martin, Supervisor for Franklin Construction Company, reported the odor as it became worse, the City of Passaic, on Friday, June 11, 1971.

Investigation showed overflow of sewage from an 8" line to Weasel Brook, a tributary of the Passaic River. The City of Passaic's Public Works Department located a blocked sewer on Louisa Street between Monroe and Monroe Street, and had the sewer rodded, thus eliminating the violation on June 17.

Unfortunately, the discharge of the sewage had been hidden by the day construction, and there is no way of knowing how long it was discharging before being discovered.

Race Sewer

June 16 to July 29, 1971

(A. Dondero)

While Mr. Lubetkin was checking on a violation at the United Wool Company on June 16, reported by Mr. Dondero, he also pointed out a leaky sewer, owned by the City of Passaic, that hangs outside the United Wool Company's building.

Mr. Lubetkin wrote to the City of Passaic on June 18, requesting this line be repaired.

On June 23, City Manager A. Galik, wrote to Mr. Lubetkin that the leak was a result of pile driving operations of Franklin Contractors at Route 21 construction and the City had directed the contractor to make repairs.

Mr. Lubetkin wrote back to Mr. Galik on June 25, requesting that Franklin Contractors do not repair the line immediately that the make repairs and, if it is determined that it is the contractor's responsibility, then to bill the Contractor for costs. This way the violation will be halted while responsibility is determined.

Leaks were repaired by July 15, 1971. An additional leak was repaired July 29, 1971. There are other problems with this and the City of Passaic line, at the United Wool property due to the day construction in Weasel Brook.

Violation & Elimination - Passaic Valley Water Commission

February 19, 1971

(R. Goldstein)

On February 19, a Passaic Valley Water Commission Work crew repaired a sanitary line on Scoles Avenue and Shafto Street in Clifton. Repairs were made some sanitary waste entered MacDonald Brook storm line. The line was repaired late Friday night, February 19.

Violation & Elimination-S. B. Penick and Company,
540 New York Avenue, Lyndhurst, New Jersey.

Intermittent November 1970 to September 1971. (F. Cupo)

A discharge from this company, going through the Lake Avenue Storm Sewer to the Passaic River, had been analyzed and found to be polluting.

On November 2, 1970, Mr. Lubetkin wrote to them directing them to cease pollution at once. On November 5, they replied that they were attempting to find the source of pollution, and that they are correcting a few conditions, including house-keeping.

On December 16, Mr. Lubetkin again wrote to them and received a reply on January 5, 1971.

The problem seemed to be a carry-over from their barometric condensers on an intermittent basis of a batch operation. They were checking each line to determine the source.

On March 17, a clogging of the sanitary sewer caused an overflow of industrial waste into the Passaic River, via the Lake Avenue Storm Sewer. On March 23, Mr. Michiels, Chief Engineer of Penick, wrote to the Commissioners, explaining the situation which had been corrected by the following day.

On April 12, Mr. Lubetkin, wrote to Mr. Michiels, stating they were still intermittently polluting and asking what was being done to locate and halt the source of pollution. On April 12, Mr. Michiels replied, listing things done by the company to eliminate the pollution to date, and also telling of additional work being done, and stating that they expect to complete this last phase within a week or two resulting in significant improvement.

A conference was held at 10:30 A. M., May 25, at the S. B. Penick plant. In attendance were: Mr. Lubetkin, Mr. Cuccinello and Mr. Cupo of the Passaic Valley Sewerage Commissioners, and Mr. Michiels, Chief Engineer, Mr. MacDonald, Ass't. to the Chief Engineer and Mr. P. Trippett, Plant Superintendent of S. B. Penick Company. The pollution problem was reviewed, together with everything done to date to eliminate the pollution. After a plant inspection, Mr. Lubetkin made two suggestions, as follows:

- 1.) Find the source of the small filamentous particulate matter entering the storm sewer by back-sampling or using a filter in the line at various points.

Violation & Elimination, S. B. Penick and Company(con't) .

- 2.) Find another path for the clean water overflowing into railroad track ditch, thence reaching storm sewers, as there were appearances of oil in the railroad ditch.

Mr. Lubetkin again wrote to Mr. Michiels on July 7, requesting an increase in effort toward eliminating the pollution.

Since samples continued bad, Mr. Lubetkin again wrote on August 13, informing Mr. Michiels that efforts to halt the pollution, to date, have not been successful, and asking for information to bring the Commissioners up-to-date on the pollution control program.

On September 2, Mr. Michiels wrote outlining work done and to be done to eliminate the pollution. On September 7, Mr. Michiels came before the Commissioners to assure them that they do not take this matter lightly and he was warned that if the pollution is not terminated soon that the Commissioners would take legal action. Samples taken during September were satisfactory.

On October 1, Mr. Michiels wrote to the Commissioners telling of reconnecting improperly connected lines and subsequent sampling indicating the pollution has been abated. On October 26, Mr. Michiels again wrote reporting on a continuous monitoring system and self policing program set up by the company.

In view of the improvements and in view of the fact that all samples taken by the Commissioners of their discharge during September and the remainder of the year were satisfactory, this violation is now considered eliminated.

Violation and Eliminations- J. L. Prescott
Company, 35 8th., Street, Passaic, New Jersey.
March 22 to 24, 1971

A soapy discharge into the Passaic River was traced to this company by Inspector R. Goldstein. A broken drain line to the sanitary sewer caused a back-up and overflow to a storm sewer thus entering the Passaic River. (R. Goldstein)

A contractor was hired, the line was repaired and pollution eliminated March 24, 1971.

Violation & Elimination - Public Service Electric & Gas Co., Municipal ?
of Passaic.

13 to 14, 1971

(R. Goldstein)

A Public Service crew broke a sanitary sewer in Third Ward Park, Passaic, while installing a pole. Sewage overflowed to MacDonald's Park. Roy Schleigh Company was hired to make repairs which were completed Wednesday, April 14, at 9:00 P.M. During repairs sewage pumped around the break.

Violation & Elimination - Public Service Gas Co., 200 East 5th St., Paterson, N.J. Municipal ?

September 1970 to September 2, 1971.

(L. Tateo)

Samples of the discharge of this company to the Passaic River analyzed and found to be polluting. The samples had a strong odor of gas and contained C.O.D. and B.O.D. above acceptable standards. December 2, 1970, Mr. Lubetkin wrote to this company, informing them of this pollution, and directing them to halt the pollution at once. On December 14, the company wrote to the Commissioners, informing them that as of December 11, the waste was diverted to the sanitary sewer.

On December 18, Mr. Lubetkin wrote to the company, informing them that in accordance with N.J.R.3. 58:14-11, the Passaic Valley Sewerage Commissioners are prohibited from receiving waste from gas companies, and they were therefore directed to immediately discontinue discharge to the sanitary sewer. They were directed to treat the waste so that it would be non-polluting and discharge it to the Passaic River.

On December 22, a communication was received by the Commissioners informing them that as of December 21, 1970, the waste from the Paterson Gas Plant was diverted from the sewer to the river.

On March 8, 1971, Mr. Lubetkin wrote to them informing them that their discharge was polluting and must be treated.

On March 18, the Commissioners received a letter, explaining that what has been done and a program of improving their discharge. This program consisted of two phases. The first phase is a major overhaul and construction to bring the effluent to required standards to be completed by September 2, 1971.

The discharge improved and on May 25, Mr. Robinson wrote reporting that the first phase was completed and samples showed the following:

	Average of 24 Samples	Maximum	P.V.S.C. Max. allowable
D. Intensity Index	35 mg/l	60 mg/l	100 mg/l
D. (5 day)	1.2	3	4
	2.4 mg/l		25 mg/l
	(single test)		

Mr. Robinson also informed the Commissioners that the second phase consisting of an activated carbon pilot plant for further reductions as may be required in the future, is underway and is currently 10% completed.

Violation & Elimination - Q Petroleum Inc., 101 Riverside Avenue,
Newark, New Jersey
 January 12, 1971 (J. McLaughlin)

The Barge Morania # 140, while making delivery to this company, a bulkhead causing a leak in a compartment. An estimated 8000 gallons of #2 fuel oil flowed into the Passaic River.

Costal Service Co., of Elizabeth, New Jersey was called to salvage and they worked under the supervision of the Coast Guard. The remaining oil in the damaged compartment was pumped into another compartment.

Clean up operations were completed Saturday, February 13, at 1:00 P.M. Inspection on February 16, at 9:30 A.M. by River Inspector, J. McLaughlin indicated a very slight oil film still remained.

Violation & Elimination - Radel Leather Mfg. Co., 445 Wilson Avenue,
Newark, New Jersey
 November 30, 1971 (J. McLaughlin)

Supervisor L. Cuccinello observed polluting material coming from company to a storm sewer at Hyatt Street and sent Inspector J. McLaughlin to investigate. Investigation revealed that an employee accidentally removed a plug from a brine tank allowing brine and sewage to flow onto the yard area and into Hyatt Street.

The entire area was flushed down immediately with a fire hose and sewage flowed to catch basin in Hyatt Street, 500 ft., from their driveway. Area was cleaned by 1:00 P.M. same day.

Violation & Elimination - Red Star Express Co., Auburn, New York
 November 13, 1971 (T. Costello)

On Saturday, November 13, 1971, at 2:15 A.M. a Red Star Express gasoline truck collided with a Rite Way Rental truck at the Airmont Avenue intersection of Route No. 17 in Ramsey, N.J. The Rite Way truck had been going northbound on Route No. 17 and had stopped at a red light at said intersection. The side of the Gasoline truck was damaged and approximately 2,900 gallons of gasoline was spilled onto the road and was flushed into nearby Ramsey Brook flowing west to Wilson's Pond also known as Napolitano's Pond.

Violation & Elimination - Rheingold Breweries, Inc., 119 Hill Street,
Orange, New Jersey
 March 5, 1971 (J. Brady)

On March 5, 1971, oil in Second River was noticed by the Passaic County Sewerage Commissioners' sampling crew and Inspector, J. Brady assigned to check this pollution. He traced the oil to the Rheingold Breweries where he was told by an operating engineer that at 1:00 A.M. an oil line broke and approximately 50 gallons of #6 Oil was lost into the floor drains which went to the Washington Street Storm Sewer. The pipe was immediately repaired but the damage had been done.

Violations & Eliminations - Ridgewood Pollution Control Plant,
Spect Street, Glen Rock, N.J.

(T. Costello)

The Village of Ridgewood has a pollution control plant which
treats the sewage from this village.

This activated sludge plant has a design capacity of 5.0 M.G.D.
treats approximately 3.2 M.G.D.

Since the effluent from this plant discharges into Saddle River,
tributary of the Passaic River it comes under the jurisdiction of
Commissioners and the Commissioners' personnel sample this effluent
on a routine basis. The licensed operator is Mr. John Lagrosa.

During 1971 of 51 samples taken 10 were unsatisfactory as
follows:

- Jan. 11, high suspended solids and turbidity
- Feb. 9, marginally high C.O.D. and turbidity
- Feb. 17, marginal suspended solids and turbidity
- Sept. 15, B. Coliform
- Sept. 21, B. Coliform
- Sept. 28, B. Coliform
- Oct. 6, B. Coliform
- Oct. 13, B. Coliform
- Nov. 16, B. Coliform
- Dec. 1, B. Coliform

In all cases the operator was notified and corrective action
taken.

Violation and Elimination - Town of Rochelle Park

June 9 to 10, 1971

(J. Perrapato)

On June 9, at 4:00 P.M., State Department of Environmental
Protection Engineer, T. Harding, notified Mr. Cuccinello that he
had seen sewage coming from a manhole, located at Essex and Ro-
chelle Avenue, Rochelle Park, and running into Saddle River.
Mr. Cuccinello and Mr. Fleming went there at once, and although
no overflow was observed, there was evidence that it had occurred.

Mr. Perrapato was assigned to check the manhole. On visits
made by him at 6:30 P.M., 8:00 P.M., and 9:00 P.M., he did not
see any overflow. However, at 8:00 A.M., June 10, the overflow
started again. Mr. R. Pucci of the Rochelle Park Sewer Depart-
ment told Mr. Perrapato that they had hired the Robinson Pipe
Cleaning Company, which arrived at 8:15 A.M. and started to
clean the line.

The overflow stopped at about 12:00 Noon, as the line was
cleaned. Mr. C. Lynch, Superintendent of the Sewer Department,
told Mr. Perrapato that the line would be cleaned more often,
so as to avoid a repetition of this type of pollution.

Violations & Eliminations - Royce Chemical Company, Carlton

Avenue, East Rutherford, New Jersey

January 26, 1971

(F. Cupo)

Inspector F. Cupo found a workman pumping industrial waste into storm drain on Carlton Avenue. The material was diverted to a sanitary line when the Inspector informed them of this violation.

Intermittent to March 17, 1971

(F. Cupo)

Intermittent pollution from this company had reached the Passaic River via the Carlton Hill Storm Sewer.

On March 5, Mr. Lubetkin wrote to this company requesting information as to what was being done to halt this pollution. When he received no reply, Mr. Lubetkin again wrote on March 17, requesting a reply and informing them that on March 11, the discharge from this company was polluting.

Mr. Lubetkin received a telephone call requesting a conference which was arranged for March 22, 1971.

At this conference, held at 10:30 A.M. at the Royce Chemical Company's plant was Mr. Lubetkin, Superintendent L. Cuccinello, and Inspector F. Cupo, representing the Commissioners; and Mr. Theodore Schwartz, Attorney; Mr. A. J. Royce, Jr., President; Mr. A. Royce III and Mr. Powell, Plant Engineer, representing Royce Chemical Company.

Mr. Schwartz indicated that his client did not want to pollute in fact did not believe he was polluting. Details were discussed. Royce agreed to better housekeeping in procedures including a clean-up of the yard and a reconstruction to isolate the loading area so that spilled material will not be accidentally washed to the river. Mr. Royce would let us know when the work was completed so that we could inspect the results.

Samples taken including and since March 17, were satisfactory. Inspector Cupo has reported he continually inspects these facilities and reports that an opening 6 inches by 3 feet which formerly discharged polluting material had been sealed.

Violation & Elimination - Sandoz Colors & Chemicals, Co., Fair-

Avenue, & 33rd Street, Fair Lawn, New Jersey

May 14, 1971

(T. Costello)

On May 14, this company discharged a dilute ammonia solution to Passaic River through a garden hose. This was done to repair the direct expansion ammonia evaporator, and while emptying the system, ammonia gas was passed through the water tower to control the gas charge. It was the resulting ammonia solution that subsequently was sent to the river.

Oscar Haug, the Sanitarian for the Borough, saw the hose and reported it to River Inspector T. Costello. He made an inspection and found nothing suspicious, and therefore made no report to the Commissioners.

Violation & Elimination - Sandoz Colors & Chemicals Co. - (Continued)

On June 4, an article appeared in the Fair Lawn News-Beacon, which stated that Mr. Haug had reported the Sandoz Chemical Company a violation two weeks ago. Mr. Lubetkin contacted Mr. Costello and asked for a full report, and it was then that the above information was revealed.

The company was warned, and officials instructed their personnel not to repeat this type of violation again.

Violation & Elimination-Second River Joint Meeting, 105 Mill Road, Irvington, New Jersey.

August 28 to September 3, 1971 (R. Goldstein)

The storms of August caused a large amount of damage to the Second River Trunk Sewer located in Newark between Franklin Avenue and McCarter Highway.

The first event was the undermining of a section of this sewer between Washington Avenue and McCarter Highway next to the River. Although the 48" cast iron pipe sagged, it did not collapse, and no pollution occurred from this. Mr. Lubetkin called Mr. Decker on August 2, 1971, and confirmed the conversation in a letter of that date, wherein Mr. Lubetkin felt it was an emergency to support the sewer before collapse.

Commissioner R. J. Sullivan of the Department of Environmental Protection sent a telegram on August 10, ordering the Second River Joint Meeting to take precautionary steps to prevent failure of this sewer. The Elson T. Killam Associates (Engineers for the Second River Joint Meeting) have designed an alternate section to replace this sagging section.

The heavy floods at the end of the month caused about a 400 ft. section of this sewer to fail between Washington Avenue and Franklin Avenue, causing pollution of Second River. D'Annunzio Bros., a contractor, was hired to replace the broken section and completed the work on September 3, 1971 at 6:00 P.M.

The Second River Joint Meeting is also making arrangements to replace the sagging section of sewer during 1972.

Violation & Elimination-Standard Carlton Hill
Properties, Carlton Avenue, East Rutherford, New Jersey.

June 23 to October 18, 1971 - Intermittent. (F. Cupo)

On June 23, 1971, at 9:30 A. M., while taking a routine sample of the Carlton Hill Storm Ditch, Inspector F. Cupo detected an odor of sewage.

Inspector Cupo traced the pollution back to the Standard Carlton Hill Properties, where he found polluting material flowing from a 30" outlet. Mr. Cupo took samples at 10:15 A. M., and reported the pollution to Mr. J. Wilson, Superintendent of this industrial complex. Mr. Cupo also spoke to Mr. Swart, Manager, and informed him that the discharge was in violation of the law and he should take immediate steps to make repairs.

On June 24, Mr. Lubetkin attempted to call Mr. Swart, at 10:55 A. M., but Mr. Swart was not in. Mr. Lubetkin spoke to his assistant, Mr. Herb Herzmansky and explained that the pollution was serious. Mr. Herzmansky said they were already working on the problem and would halt the pollution as soon as the source was discovered.

On June 25, a contractor attempted to halt the flow with rubber tube and boards, but was not successful with his very crude attempt.

On July 7, Mr. Lubetkin wrote to Mr. Swart again, directing him to halt the pollution.

On July 12, Mr. Swart called Mr. Lubetkin to inform him that they were unable to get a proper plug for the sewer, therefore, they would attempt to pour concrete and seal it. On July 19, Mr. Swart called and claimed the broken pipe was sealed, but there were other problems relating to the dirty open culvert, the point being that during dry weather, there was no pollution, but during a rain, polluting material lying in the culvert was washed into the storm sewer, thence to the river. This was proven by Inspector Cupo, using a toy boat during the rainstorm of July 30, after dye testing had failed. Since the pollution exists during rain, it was carried as a violation until some remedy was given to the open culvert problem.

On August 31, Mr. Lubetkin wrote to Mr. Swart, directing him to change the storm system, so as to eliminate this as a source of pollution. On September 10, Mr. Swart replied that they were in the process of obtaining estimates for closing the open culvert which pollutes, and feels the project can be completed by October 15. On September 14, Mr. Lubetkin wrote requesting details. Mr. Swart did not reply, but on October 15, work to seal the opening leading to the storm sewer had began and completed by the following inspection time which was October 18. Although polluting material no longer goes to the storm sewer, the inspector's reports indicates that it was now trapped in the sand bed and an odor problem has developed.

Violation & Elimination - Stepan Chemical Co., 100 West Hunter
avenue, Maywood, New Jersey
Intermittent

(J. Perrapato)

This company had a barometric condenser which discharged into a pit about 5 ft. on each side and 5 ft. deep. This pit acted as a separator where aromatic oils floated to the surface and the clear water was discharged into Lodi Brook (known locally as "Stink Creek"). Since the volume is large compared to the volume in the brook, the odor is imparted to the brook.

On Wednesday, January 13, 1971, a citizen complained to River Inspector, John Perrapato, concerning odors in Lodi Brook. A sample taken of the discharge of this company was high in C.O.D., suspended solids, pH, turbidity and had a threshold odor of 16.

Upon being notified of the problem, Mr. Swanson of Stepan Chemical wrote to the Commissioners on January 15, 1971. Mr. Swanson stated a seal in the hot well had been broken and that some oily material was getting into the discharge from the plant. He also stated that the seal had been restored Thursday night, January 14.

Mr. Lubetkin wrote to Mr. Swanson on January 19, explaining the barometric condensers can be a source of pollution and if this was the case with Stepan, then it will be necessary for them to treat the water before discharging to the stream. Mr. Swanson replied to the Commissioners in a letter dated January 21, that they felt their system was satisfactory and only the accident to the seal caused a problem.

On February 5, Mr. Lubetkin wrote to Mr. Swanson requesting information on volume of flow and informing him that if the discharge had a greater threshold odor of 8, regardless of other parameters, it was considered polluting. On February 10, Mr. Swanson replied, giving the requested flows and asked information concerning threshold odors. Mr. Lubetkin replied February 23. Since all samples taken in January showed threshold odors of 8 or less, the violation was considered eliminated but was watched closely by the Commissioners' River Inspection Department.

As weather became warmer odors again developed and on April 22, Mr. Lubetkin informed the company that they were polluting and directed them to treat their waste and to halt the pollution at once. Mr. Swanson, Director of Production and Engineering, replied on April 28, that they were doing everything possible to tighten up operations and to track down the source of odor pollution within the plant.

However, during May, pollution continued with no apparent results; therefore, on May 24, Mr. Lubetkin again wrote to this company directing them to halt pollution. Mr. Lubetkin also directed the company to submit to the Commissioners, prior to June 15, 1971, a detailed plan on what they intend to do to remove odors from their discharge before it reaches Lodi Brook, together with an acceptable schedule table showing when the work would be completed.

Violation & Elimination - Stepan Chemical Co.- (Continued) -

On June 11, Mr. D. Francis, Vice President, wrote to Mr. Lubetkin, requesting information and suggesting a conference to discuss the problem. Mr. Francis indicated that the input river water had a higher threshold odor limit than we were allowing him, which had been lowered to 2 due to large volume of discharge as compared to Brook size. June 11, at 2:30 P.M., Mr. Lubetkin, Mr. Cuccinello, and Mr. Perrapato from the Commissioners' staff, met with Mr. Francis and Mr. Swanson from Stepan, at the company offices in Maywood. The problem was discussed and Mr. Lubetkin said that they would sample both input and output together and give each other the results of the analysis to determine the source of the error, if any.

Samples were taken on June 17, of both intake from Saddle River (in which the Commissioners found no odor), and of this company's discharge which had very strong odors.

Mr. Lubetkin wrote to Mr. Francis on June 24, confirming the discussion of June 11, and informing him of the results of the June 17 sample, and requesting copies of the analysis made by Stepan.

Mr. Lubetkin asked what the company would do about halting this pollution as soon as possible, as the odor was definite, and stated that if another conference was necessary, the Commissioners' personnel were available.

Samples taken in June and July confirmed the June 17 samples, that the intake was odor free, but the discharge had a strong odor.

On July 22, Mr. Lubetkin wrote to Mr. Francis, informing him that the Commissioners' results indicated odor pollution from this company, and requested the results of their analysis.

On July 29, Mr. Francis replied, giving their results which were much higher than the Commissioners on both intake and discharge. Obviously, Stepan chemists, (professionals at odor detection), have much more sensitive noses than the Commissioners' laboratory staff. Also, as pointed out in the Stepan letter, they were reading intake water as total odor, (including a sometime characteristic mild musty odor of stagnant water containing plant life), while Commission personnel were detecting the characteristic aromatic odor of Stepan discharge.

Mr. Francis stated that to help control the odor complaint, they will shut down Plant No. 4 aromatic distilling operations, probably within two weeks, and will drain Building No. 10 hot well to the sanitary sewer, until such time as they install a closed loop system, this within two weeks.

A report dated August 13, 1971, from Inspector Perrapato, stated that they have diverted the hot well discharge (the major source of the odor) to the sanitary sewer, thus reducing the volume and odor to Lodi Brook to the point where, at the present, the violation was eliminated.

Violation & Elimination - Stepan Chemical Co. - (Continued)

Mr. Lubetkin wrote to the company on August 18, requesting that be informed as to when the company would install the "closed-loop" system.

As of the end of 1971 no "closed-loop" system had been installed there still is no further odor pollution of Lodi Brook.

Violation & Elimination - Swift & Company, Schickhaus Division,
4 Harrison Avenue, Kearny, New Jersey
 February 24 to 27, 1971 (J. Colello)

On Thursday, February 25, Mr. Lubetkin received a call from Mr. Harding of the Department of Environmental Protection concerning pollution from this company going into Frank's Creek, a tributary of the Passaic River. Upon investigation, Inspector J. Colello, reported that a sewer had clogged and the back pressure had broken a tile pipe in their plant and they pumped this material into Frank's Creek.

In response to Mr. Lubetkin's letter of February 26, Mr. F. E. [redacted], Chief Engineer of this company explained that after the break, they immediately hired outside contractors to supplement their own force. The repairs were completed at noon on Saturday, February 27, 1971. The task of cleaning up the Creek was started immediately and continued until completed to the satisfaction of all concerned.

Violation & Elimination - Ten-Da-Brand Food, Inc., 176 Saddle
River Avenue, South Hackensack, New Jersey
 September 1961 to May 28, 1971 (J. Perrapato)

This company packages meats, and washings from their meat packaging operations were discharged into Fells' Brook, a tributary of the Passaic River.

On September 28, 1961, Mr. Lubetkin wrote to Mr. Kanoff, president of this company informing them that the discharge was polluting.

Mr. Kanoff replied, October 28, that they would hire an engineer to accomplish a separation of dirty water from clean water and install a septic system for the dirty water.

Since nothing was done, the matter was referred to the Commissioners' Counsel for legal action. On December 1, 1961, Mr. Durkin, Counsel wrote to Ten-Da Brand giving them 10 days notice to abate pollution.

pollution & Elimination - Ten-Da-Brand Food, Inc., - (Continued) -

On December 7, Mr. Thariz, a Professional Engineer, wrote to Lubetkin that he had been retained by Ten-Da-Brand to work on the pollution problem and requested a 30 day extension.

On December 11, Mr. Durkin received a letter from David Hammer, attorney, representing Ten-Da Brand, asking what manner can they proceed without the necessity of institution of a suit.

On January 2, 1962, Mr. Hammer again wrote stating that his client has informed him that the Township of So. Hackensack will install a sewer which will remedy the situation.

Mr. Durkin replied January 12, 1962 asking for them to outline program of pollution abatement.

Mr. Lubetkin wrote a memo dated Jan. 19, 1962, to Mr. Durkin informing that Ten-Da Brand was still polluting.

On January 19, 1962, Mr. Hammer wrote to Mr. Durkin outlining the problem, asking for conference.

On March 20, Mr. Kanoff wrote to Mr. Lubetkin, asking for chemical analysis of his discharge so that his consultant could design a treatment method. Mr. Lubetkin replied March 20, giving the available information.

On April 17, 1962, Mr. R. Chandless, attorney for South Hackensack, wrote to Mr. Durkin explaining that Ten-Da Brand has been negotiating with So. Hackensack with respect to the installation of a sewer. Mr. Chandless also made inquiry as to terms on which this sewer could be connected to the Passaic Valley Sewer Commissioners' system.

On April 26, Mr. Durkin replied outlining what had to be done to connect a sewer system to the Passaic Valley Sewerage Commissioners' system.

On August 17, Mr. Kanoff wrote to Mr. Lubetkin outlining plans for a rudimentary filter system.

On October 31, Mr. K. Job, engineer for South Hackensack, wrote that he has been authorized by South Hackensack to study the situation with a view of installing sewers.

To make a very long story short, this matter, for several years, continued with Ten Da Brand installing grease traps and a filter, which were not completely satisfactory. However, since the volume was very small and it appeared that sewers would be installed, the Commissioners elected not to take the matter to court.

Finally when no progress was apparent in South Hackensack's attempt at a sewer construction, Mr. Lubetkin again notified Ten-Da Brand that they were polluting (February 27, 1968), and put them on notice to cease pollution at once.

ation & Elimination - Ten-Da-Brand Food, Inc., (Continued) -

Mr. Kanoff replied March 1, 1968, enclosing a copy of a letter dated February 20, 1968, from the Township of South Hackensack to Ten-Da Brand in which the Township Clerk advised that the governing body had made plans for the sewer a few years before but had encountered difficulty with the City of Garfield for the use of their easements to reach the Commissioners' outlet. He stated that they were discussing this further with the City of Garfield.

On March 5, 1968, Mr. Lubetkin wrote to the City of Garfield to determine the status of this proposed sewer and received a reply dated May 24, 1968 that after studying the proposal and reports by the attorney and engineer, the City of Garfield has advised that they will not permit South Hackensack to connect to the system.

On May 23, Mr. R. Chandless, Attorney for South Hackensack (also for the City of Garfield) wrote to Mr. Lubetkin stating that if necessary South Hackensack will build a sewer to the Commissioners' facilities under county roads, and requested information on application etc. so that they could proceed. Mr. Lubetkin replied May 24, 1968, giving the necessary information.

On July 19, 1968, in reply to a letter from Mr. Durkin (July 17) Mr. Chandless advised the Commissioners that they have negotiated an agreement with the Borough of Lodi and will be preparing formal contracts for approval by the Commissioners, shortly.

On August 2, Mr. Chandless submitted a copy of the agreement between the Town of South Hackensack and the Borough of Lodi in respect to the disposal of the sewage from South Hackensack.

Changes had to be made, and finally at their regular meeting of October 30, 1968, the Passaic Valley Sewerage Commissioners approved the contract between the Town of South Hackensack and the Borough of Lodi.

On June 23, 1969, Mr. Lubetkin wrote to Mr. Chandless informing him that illegal pollution still emanates from So. Hackensack, and although we were told construction on a sewer would start as soon as weather permitted, nothing visible had been done.

Mr. Chandless replied on June 27, 1969, that this work was temporarily delayed by the need of an emergency appropriation. The ordinance was adopted July 3 and took effect July 31, 1969. The Township submitted the plans for approval to the State Board of Health and expected approval shortly. However, State approval did not come as quickly as expected, and finally on September 29, 1969, Mr. Lubetkin wrote to Mr. E. Segesser, Chief Engineer of the State Water Pollution Control Program, asking information on the sewer extension.

Violation & Elimination - Ten-Da-Brand Food, Inc., (Continued)-

On November 3, 1969, Mr. Lubetkin sent another letter to Mr. Segesser explaining the problem and again asking for information on this matter.

On November 20, 1969, Mr. Lubetkin received a copy of the approval by the State dated, November 14, 1969, for the reconstruction of the South Hackensack sewer.

On January 9, 1970, Mr. Lubetkin wrote to Mr. Chandless requesting a schedule of construction. Mr. Chandless replied that bids would be received February 4, 1970. A contract was awarded to D. Stamato & Company, Inc., and the sewer was completed March 1971.

Mr. Lubetkin wrote to Ten-Da-Brand Foods, Inc., on March 31, that they should make arrangements to immediately connect to the South Hackensack Sewer and that the Commissioners expect the work to be completed by April 10, 1971.

On April 6, Mr. Kanoff, of Ten-Da-Brand, requested an extension of time of 30 days. This was granted by Mr. Lubetkin in a letter dated April 8.

Finally on May 28, 1971, after ten years, Ten-Da-Brand Food, Inc., made the connection to this sewer, thus eliminating this pollution.

Violation & Elimination - Tenneco Chemicals, Inc., Color Division, 374 Main Street Street, Belleville, N.J.
February 1 to May 26, 1971 (D. Miele)

Colored discharges from three outlets from this plant were noted by Mr. Lubetkin. Upon investigation by the River Inspector, samples confirmed pollution, and the company was so notified and directed to halt pollution at once.

On March 2, Mr. W. P. Anderson, Director of Environmental Sciences, wrote to Mr. Lubetkin, explaining what the company intended to do to eliminate the pollution on two of the outlets.

Mr. Lubetkin wrote back on March 5, explaining that there was a pollution from a third outlet.

The company sealed off their discharge into the 48" storm sewer and repiped to the sanitary sewer, thus eliminating the pollution from that outlet.

On April 1, Mr. Anderson wrote to Mr. Lubetkin explaining what was being done, but stated that the 15" line was not connected to their system and therefore not their responsibility.

Violation & Elimination - Tenneco Chemicals, Inc. - (Continued) -

It was the belief of Tenneco supervisors that the 15" line belonged to Belleville and went through their property without any connection to their system.

During May, this company blocked the passage way from their plant site to the 16" storm sewer collecting the surface water in the corner of their property. It is being collected in a pump pit. They purchased a pump to transfer this water to the sewer on July 28, 1971.

Under the circumstances the violation was considered eliminated and the Commissioners' personnel contacted Belleville and asked them to trace back the 15" sewer line to the intermittent source of pollution, (see Violation Town of Belleville, page 121).

Violation & Elimination - Thomasset Colors, Division of Sterling Drug, Inc., 120 Lister Avenue, Newark, N.J.
August 18 to 20, 1971 (J. McLaughlin)

Mr. Lubetkin received a call from Mr. D. Clark, of the Environmental Protection concerning a telephone call about green in the River at Newark. At Mr. Lubetkin's instruction, Mr. Goldberg investigated. He found a large amount of green fluorescein dye coming from the Lockwood Street Storm Sewer.

This was traced to the Thomasset Colors, where it was found that a drum of the dye had spilled and flowed to the storm sewer. Mr. Goldberg reported sloppy housekeeping and potential pollution through the Lockwood Street Sewer, each time the ground was washed or drained.

Mr. Lubetkin contacted the City of Newark's Sewer Department and visited the plant, together with Mr. Goldberg and Mr. Fleming of the Passaic Valley Sewerage Commissioners, and Mr. Van Riper and Mr. Altiero of the City of Newark on August 19, 1971. They met Mr. Paul Thomasset and Mr. Tyron Schulze of Thomasset Colors and pointed out the various points of sloppy housekeeping. Both the Newark representatives and Mr. Lubetkin informed Thomasset that any area which drains to a storm sewer must be kept clean. This was confirmed in a letter from Mr. Lubetkin dated August 25, 1971.

Inspector McLaughlin reported that as of August 20, no further evidence of pollution was indicated, and that the company was continuing a clean-up operation.

Violation & Elimination - Uber Trucking Company, Woodbridge Avenue, Iselin, N.J.

March 9, 1971

(J. McLaughlin)

On March 9, Mr. Wolf of Fiske Brothers Refining Company, 29 Lockwood Street, Newark, called and stated that approximately 20 gallons of #2 oil were spilled by the Uber Trucking Company during their delivery. Inspector McLaughlin was sent to investigate and he reported that the driver had failed to blow the hose clear and when it was disconnected, approximately 20 gallons of oil spilled to the sidewalk. Sand and Chemical Dri-All was spread over the area and shoveled into pails and the area was completely cleaned.

Violation & Elimination - United Wool Dying & Finishing Co., Canal Street, Passaic, N.J. 07055

June 4 to July 14, 1971

(A. Dondero)

On June 4, Mr. A. Dondero reported a discharge coming from the property of this company. There was a misunderstanding when the Commissioners' inspectors tried to get to the source of the pollution which resulted in correspondence dated June 4, by Mr. Schlenger to Mr. Lubetkin. The result was a visit to the site on June 7, by Mr. Lubetkin with the Commissioners' river inspection personnel. Samples were taken of a discharge that flowed from beneath their building to Weasel Brook. Analysis showed this to be polluting.

Mr. Lubetkin wrote to Mr. Schlenger on June 18, informing him of the pollution and requesting the company do whatever is necessary to halt it.

Mr. Schlenger replied on June 22, stating they were checking the source of water and as soon as the source is located they will make corrective measures. They stated that they suspected it might be due to back-up in the sanitary line from causes beyond their control, (possibly from reconstruction of the Passaic Sewer by Franklin Construction for the highway installation).

United Wool hired Labowski Bros. of Wayne, N.J. to install approximately 115 feet of 8 inch cast iron pipe to replace broken pipe, thus eliminating this pollution. Work was completed as of July 14, 1971.

Violation & Elimination - Westinghouse Electric Co., 720 Washington Avenue, Belleville, N.J.

March 1 to 31, 1971

(D. Miele)

In attempting to trace back a pollution in the Nutley-Belleville Storm Sewer, it was discovered that a wash sink in this company was erroneously connected to the storm sewer. The company had the sink reconnected to the sanitary sewer, thus eliminating the violation.

Violation & Elimination-Whippany Paper Board Co.,
1 Ackerman Avenue, Clifton, New Jersey.
October 13,14, 1971 (F. Wendt)

accident

On Wednesday night, October 13, the 24 inch sewer in Ackerman Avenue, which carried the waste from this company to the Passaic Valley Sewerage Commissioners' trunk sewer in Clifton broke.

The waste from this broken sewer was gushing up through the sidewalk and entering the street catch basin and thence the Passaic River via the Dundee Canal.

As soon as it was detected, Mr. Collier, Plant Superintendent, suspended all plant operations halting the flow of waste, stopping the pollution.

The company hired a contractor and the line was repaired by 3:00 P. M., October 14. Plant operations resumed 7:00 A. M., Friday, October 15, 1971.

During the time the break was being repaired no pollution occurred because of the suspension of plant operations. The Plant Manager is to be highly commended for his regard of the public by halting the pollution. Too many companies, when an accident occurs, desire to maintain operation and continue polluting until repairs are made.

Violation & Elimination-Woburn Chemical Corp.,
1200 Harrison Avenue, Kearny, New Jersey.
March 16, 1971 (J. Colello)

A black material in Frank's Creek was traced back by Inspector J. Colello and Superintendent L. Cuccinello to this company at approximately 1:30 P.M.

The sanitary line had been blocked causing an overflow to the Creek. Heyrich Company who happened to be nearby was hired to clean the line the same day and the pollution was eliminated by 5:00 P.M., on March 16.

PART III

The following are reports on polluting discharges, still in existence as of the end of the year, into the streams under the jurisdiction of the Passaic Valley Sewerage Commissioners, together with information on what is being done to abate such pollution, together with the name of the River Inspector assigned to the pollution.

Violation - Town of Belleville, 15" Sewer Under Tenneco Property

June 28-December 31, 1971

(D. Miele)

There is a 15" sewer which discharges polluting material intermittently into the Passaic River. On June 8, Mr. Lubetkin wrote to the Town of Belleville notifying them of the pollution and telling them that the Tenneco Company denied ownership. Mr. Lubetkin requested that the Town tell the Commissioners if this sewer is part of the Belleville Storm Sewer System, and is so, Belleville should locate the source of pollution and have it halted. If Belleville denied ownership, the Commissioners would take action to have the sewer sealed to halt the pollution. On July 18, Mrs. M. Senatore, Director of the Department of Public Works, wrote that the Sewer Division is in the process of making tests to determine the origin of the pollutants emanating from this line. They were having difficulty with tides, as the pipe was covered by the river more often than not.

At the end of July, Mr. Lubetkin was informed that the Town of Belleville had not been able to find a record of this sewer, nor had they been able to find where it was connected. Mr. Lubetkin requested a letter from the Town denying ownership, and then the Passaic Valley Sewerage Commissioners would move to have the sewer sealed. Mr. James Soldo of the Town requested a few more weeks for further checking.

On August 12, at Mr. J. Soldo's telephone request, Mr. Lubetkin sent him copies of the analysis, so that he might identify the source. At the end of August, Mr. Soldo called Mr. Lubetkin and informed him that they would seal the outlet.

Attempts at sealing were unsuccessful during September due to the storms and extreme high water.

On October 1, a temporary plug, borrowed from the Passaic Valley Sewerage Commissioners, was installed in this line to halt the pollution. During the month, no complaints were

Violation - Town of Belleville - (continued)

received about this line being sealed, despite the fact that there was much rain, and therefore the theory that this was an old abandoned line which had a leak or connection to an industrial waste source appeared true. Mr. Lubetkin contacted the Town of Belleville on October 25, to have them install a permanent plug and return the temporary one to the Commissioners. He was told that Mr. Soldo was on vacation and that nothing could be done on this matter until Mr. Soldo returned.

Mr. Lubetkin contacted Mr. Soldo again on November 8 and was informed by Mr. Soldo that the plug had not worked as the polluting material was going into the river around the plug, through a break in the sewer. Apparently, the Passaic Valley Sewerage Commissioners' Inspector, Mr. Miele, had not noticed this by-pass and had not reported it to the Commissioners. Mr. Soldo stated they would attempt to relocate the plug further in the sewer before the break. The plug was put deeper in the line, but was not set satisfactorily, and it subsequently blew out and was lost into the Passaic River.

As of the end of 1971, polluting material is still flowing intermittently into the Passaic River from this outlet.

Violation - City of Clifton - Athenia Storm Sewer
Sept. 1970 - Dec. 1971) (F. Wendt)

The discharge from this sewer which enters into Weasel Brook, near Fornelius Avenue and Lewis Place, still contains a significant amount of coliform, although generally not polluting in other parameters. The City of Clifton had supplied the Commissioners with drawings, showing the location of manholes in this sewer and connecting sewers. On Wednesday, July 28, samples were taken at ten locations along the path of this sewer and analyzed in an attempt to learn the source of the pollution. Unfortunately, unknown to the Commissioners' personnel, there are two parallel storm sewers in this area. These sewers are interconnected at certain points, but these were not shown on the drawings. Mr. Lubetkin visited Clifton's engineering department on August 25 to discuss these sewer locations. Subsequently new drawings were supplied, showing both sewers.

Samples were taken on September 23, but no definite pattern could be ascertained to locate the source of pollution. During October, the storms prevented proper investigation. During November and December, further samples were taken and a flow pattern is being ascertained. This matter will be continually checked in 1972 until the source of pollution is found.

Violation - Frank's Creek, Kearny, New Jersey
Intermittent (J. Colello)

Mr. F. Doe, Plant Manager of Swift and Company, reported oil in Frank's Creek. Inspector J. Colello was sent to investigate and spoke to Mr. Doe at 11:30 on August 9, 1971. Mr. Colello spent all day and thought he traced the oil to Woburn Chemical, across the street, but when he attempted to visit their office they were closed.

On August 10, Mr. Colello, with Mr. Fleming and Mr. Miele (another inspector), visited the Woburn plant and spoke to Mr. D. Fritz, Plant Manager. Mr. Fritz said that they would clean their grease pit, but the oil in the stream was not the same type as the grease in the Woburn pits.

On Thursday, August 19, Mr. Lubetkin, together with Mr. Goldberg and Mr. Fleming, inspected Frank's Creek along Harrison Avenue, Kearny, and saw definite signs of large oil pollution. Mr. Lubetkin walked upstream to the point adjacent to Woburn, and pointed out that the creek was clear at that point. Since it was impossible to walk alongside the creek due to heavy growths, Mr. Lubetkin instructed Mr. Fleming to return the following day with boots and walk the stream until he learned the source of the oil.

Other work required his attention on Friday, but on Monday, August 23, Mr. L. Cuccinello, Supervisor of River Inspection, on his return from vacation, returned with the line crew and discovered that the culvert under Harrison Avenue, carrying Frank's Creek from the north to the south side of Harrison Avenue, had a sewer inlet which was discharging oil into the creek. Mr. Cuccinello traced this sewer along Harrison Avenue by lifting manhole covers until he came to a street catch basin where oil was entering from a ditch between the properties of Reliable Auto Exchange and T. Roselle and Sons.

Violation - Frank's Creek, Kearny, N. J.
(continued)

Further investigation revealed a large lake of oil behind the properties of Diamond Head Oil refining Company and Reliable Auto Exchange. Mr. Martin Morrison, owner of Diamond Head, told Mr. Fleming that the condition has existed for at least 35 years. It was formerly an oil dump ground for all the industries in the area, and oil entered Frank's Creek after each rain fall. He stated that it was either City or State property.

On August 23, Mr. Lubetkin wrote to the Town of Kearny, explaining about the oil pollution and stating that since the oil was reaching Frank's Creek through a Kearny storm drain, it was the responsibility of the Town to halt the pollution.

On September 3, Mr. N. Doyle, Town Attorney replied that the sewer was a County drain and that the oil was on property of the State of N.J. (recently acquired for Interstate Highway Route 280). On October 13, Mr. Lubetkin wrote to N.J. State Department of Transportation informing them that an oil pool on property owned by them was intermittently polluting Frank's Creek and asked what the Department intended to do concerning this matter.

On November 12, Stuart Kahn, Deputy Attorney General of New Jersey wrote to the Commissioners' Chief Counsel, J. Segreto, that they are advised that this pollution has its source at Diamond Head Oil Refining Company. He also reported that the matter has been referred to the Division of Environmental Protection for reinvestigation and reconfirmation. He stated that he did not feel it would be proper to give a time schedule as to proceedings. In view of the fact that this is now in the hands of the Division of Environmental Protection of the State of New Jersey, the Commissioners will do nothing further in this matter except to report progress (if any) and to continually request progress reports from the State.

As of the end of 1971, nothing further has been heard from the State on this matter.

Inter-
Mit-
tent

Violation-Houdaille Construction Materials Inc.,
Notch Road, Montclair Heights, N.J. (D. Miele)

The discharge from this plant to Pearl Brook was found to be turbid and polluting. On October 28, 1970, the Inspector informed this company of the problem, and was told the settling pits had to be cleaned.

On November 6, 1970, the company wrote to Mr. Lubetkin, stating that they would clean the ponds shortly and would henceforth keep them clean. Due to bad weather, this cleaning was delayed until November 23, 1970. However, subsequent sampling indicated pollution continued with high pH.'

On December 21, 1970, Mr. Lubetkin wrote a letter to the company informing them of the continued pollution and ordering them to halt the pollution at once. The Commissioners received a reply dated January 5, 1971, which stated that the matter is being turned over to the Engineering Department for a study to determine the problem and to recommend necessary corrective action.

After speaking to Mr. Lubetkin on January 20, 1971, to determine the Commissioners' requirements for discharge, Mr. Hendrickson confirmed his verbal statements in a letter dated January 20, that they were awaiting results from the New Jersey Testing Laboratory Company, and soon as they were received, the results would be immediately evaluated, and the Commissioners would be informed of what would be done.

On February 5, the company wrote to the Commissioners, stating they had traced the problem to the Ready-Mix Concrete Company, whose plant was on their property, and had made modifications to eliminate the pollution as of January 26. Mr. Lubetkin replied on February 8, that samples taken subsequent to January 26, were still polluting, and they were again directed to halt the pollution at once.

On March 11, the Commissioners received a letter describing steps taken by this company to eliminate the pollution. Since pollution continued, Mr. Lubetkin wrote to this company on April 20, informing them of continued pollution despite past efforts. On April 30, Mr. Oldenburg, Chief Engineer of Houdaille, outlined several pollution control steps, including flocculation, pH control etc., all of which should be completed by May 28, 1971.

Houdaille Construction Materials Inc., (continued)

On May 11, Mr. Hendrickson wrote, outlining additional steps taken by their company, including the addition of a flocculent. On June 15, Mr. Hendrickson reported the following work had been done.

1. pH-controlled with Oakite Enprox 72 (a dilute sulfuric acid).
2. Turbidity-controlled with flocculating agent Oakite Clarifier (a polymer resin).
3. Solids Settling-larger settling ponds.

Since occasionally a small amount of an asphalt or petroleum based material reached the pond by accident, Houdaille was requested to install a method of containing this when such an accident occurred. On June 30, in a letter to Inspector D. Miele, Mr. Hendrickson reported that they were investigating a type of straw excelsior that would absorb any stray oil that might find its way to the plant. They expected to complete this, plus a holding pen in a few days.

On July 8, Mr. Hendrickson called Mr. Lubetkin and informed him that they were abandoning the straw excelsior idea and were now looking for a method of recirculating the water so that there would be no discharge or pollution, and that they would contact the Commissioners shortly on progress.

Since samples indicated continued pollution, Mr. Lubetkin wrote to Mr. Hendrickson on July 29, reminding him of the July 8, conversation, and requesting a time table indicating when this pollution might be halted.

On August 17, 1971, Mr. Hendrickson wrote confirming the telephone call of July 8, wherein they believed the only sensible solution was to recirculate the water in the settling ponds. He then stated that further studies indicated this was not the solution.

They finally concluded that the only way to eliminate the solids was to eliminate the scrubbers on the wet collection system. They made application to the State of New Jersey, on October 22, 1971, for permission to alter the existing dry plant air pollution control apparatus.

Violation - Houdaille Construction Materials, Inc.
(continued)

On October 27, Mr. Hendrickson submitted to the Passaic Valley Sewerage Commissioners a copy of their application to the State Department of Environmental Protection. He also included a copy of a drawing showing phase one of the equipment to increase their capacity of their dry dust collection system (this would eliminate air pollution without having the troublesome polluting liquid to dispose). He stated that it was their intention to have this equipment installed by April, 1972.

On December 8, Mr. Lubetkin wrote for a progress report and received a reply dated December 10 in which he enclosed a copy of an application for a permit to Construct, Install, or Alter Control Apparatus or Equipment for phase Two which was sent December 7 to the State Department of Environmental Protection. He further advised that both phases would be completed prior to commencing operation in April, 1972. A second letter, also dated December 10, informed Mr. Lubetkin that they have received approval of Phase one from the State and construction started that morning.

This plant will shut down for the cold weather (approximately January 15, 1972) and therefore there should be no further pollution after that dated.

Violation - Lyndhurst Yacht Club, Riverside Avenue,
Lyndhurst, New Jersey
October 29 - December 31, 1971 (F. Cupo)

After receiving an inquiry from a Mrs. Gloria Woertz, a citizen in Lyndhurst, in October, 1971, concerning the type of sanitary disposal the Lyndhurst Yacht Club has, Mr. Lubetkin assigned Inspector F. Cupo to check. Mr. Cupo contacted Mr. P. Forte, the Health Inspector of Lyndhurst, and together they attempted to inspect the facilities, but found them locked.

Finally, after several weeks of attempting to get into the premises, Mr. Forte reported on November 11 that he had located a Mr. R. Wilson of Riverside Avenue, Lyndhurst, an officer in the Yacht Club. Mr. Wilson told him that in order for us to enter the premises, we would have to send a written request to the Lyndhurst Yacht Club.

Violation - Lyndhurst Yacht Club (continued)

On November 15, Mr. Lubetkin wrote to the club, asking for the method of sewage disposal used by the club.

On December 3, Mr. William Marchioni, Commodore of the Club, replied stating that the Lyndhurst Yacht Club had obtained permission from the Commissioner of Public Works to go into the Lyndhurst Sanitary Sewer System. He stated that the connection should be completed within the next month or so. This will be checked by the Commissioners in January, 1972.

Violations - City of Newark

(J. McLaughlin)

General: On February 6, 1970, Judgement was entered against the City of Newark to abate all pollution from the City's Lockwood Street Storm Sewer and Blanchard Street Sewer by May 6, 1970 (3 months from the date of the Order), and the City of Newark was ordered to remove all pollution from the Meadowbrook Storm Sewer by August 6, 1970, (six months from date of Order). The City awarded contracts to construct a sewer in Lister and Blanchard Streets in order to abate pollution from Blanchard Street, Lockwood Street and Brown Street Storm Sewers. Problems occurred during construction due to change of engineers and administration.

The firm of Barnett and Herenchak was hired by the City to take over the engineering and supervision of construction, formerly done by Constrad. Work on this construction started on September 10, 1970, and continued until pollution was eliminated from the Brown Street Sewer.

The City appeared in Court on September 18, 1970, and made application for an extension of time on their pollutions.

On August 25, 1971, Mr. Lubetkin wrote to Mr. S. Friscia, Director of the Department of Public Works, informing him that the pollutions have continued for a considerable period of time. He was also informed that it was the Commissioners' opinion that a considerable portion of the pollution in the lower Passaic River can be attributed to the discharges from these Newark Storm Sewers.

A conference was held on October 13, with Mr. Van Riper and R. Altiero of Newark, at the Commissioners' office. At this conference, the representatives of the City promised to move forward to abate these long standing pollutions. Details are given in the individual sewer pollution reports which follow.

Violations - City of Newark (continued)

Mr. Segreto, the Commissioners' Chief Counsel, in a report to the Commissioners dated December 3, 1971, summarized the situation and recommended that he and Mr. Lubetkin arrange a joint conference with the representatives of the City and then give a full report to the Commissioners so that the Commissioners can take appropriate action. At the request of the Commissioners at their meeting of December 17, Mr. Segreto wrote to the Mayor and City Council on December 20, bringing this matter to their attention and pointing out that the City was in default of a court order of 1970, and informing them that if the City does not take action to comply with the court order, then an action will be instituted immediately for supplemental relief. As of the end of the year no response had been received. The following is the situation on each of the specific violations as of the end of 1971:

Blanchard Street Storm Sewer - The discharge from this sewer contains oil, high B.O.D., and an exceptionally high C.O.D. The City of Newark, on March 30, 1971, engaged Robinson Pipe Cleaning Company to make a T.V. inspection of this line. However, the City reported that the inspection was frustrating because the storm sewer was not cleaned properly by the contractor, and will have to be attempted again at a later date.

At the October 13 conference, Mr. Van Riper said he would recommend to the City that a 1300 foot section of this sewer be replaced.

On December 14, Inspector J. McLaughlin reported that a greater quantity than usual of oily liquid was being discharged by this sewer to the River with a strong petroleum odor. Mr. Van Riper was informed by telephone on December 15, by Mr. Goldberg as soon as he saw the sample, that the sewer had a potential explosive material in it. (This discharge had a C.O.D. of 26,107 mg/l). Mr. Lubetkin confirmed this in a letter dated December 17, 1971 to Mr. Van Riper.

Brown Street Storm Sewer - Previously the end of this sewer at Lister Avenue had been sealed and this storm sewer now only drains a one block length from the Passaic River to Lister Avenue. At the time it was sealed (4/23/71), it was assumed pollution had been abated since no dry weather flow came from this sewer.. However, as the tide goes in and out, it alternately fills and drains this sewer and evidently there is polluting material entering into this sewer again, since a sample taken December 14, 1971, showed high C.O.D., turbidity, and was positive to a H₂S test.

violations - City of Newark (continued)

Harrison Ditch Storm Sewer - Oily liquid continues to discharge from this sewer to the Passaic River.

On October 28, 1971, Inspector McLaughlin met with Mr. Altiero and three assistants, and traced a pollution to the Bayonne Barrel and Drum Co. (see page 67 of the report), from this sewer. The pollution from this source was halted during November, but pollution from the Harrison Ditch Storm Sewer continues. (The December 14 sample had a C.O.D. of 5662 mg/l).

Lockwood Street Storm Sewer - Mr. R. Altiero, Newark's Sewer Department Engineer, reported that on March 22, 1971, visual inspection of the Lockwood Street Sewer, between Lister Avenue and Euclid Avenue was attempted. However, due to the excessive amount of silt and mud, it was impossible to complete that inspection. This portion of Lockwood Street Storm Sewer was again cleaned by LaSal Contractors and examined. It was reported at the October 13 conference by representatives of Newark that part of this sewer was failing and a consultant would have to be hired for recommendations.

Meadowbrook Storm Sewer - Coliform is still being detected at the discharge of this sewer to Second River, but the discharge is generally not polluting in other parameters. During 1971, several polluting connections to this sewer in Belleville were eliminated (see Belleville page 68).

Roanoke Avenue Storm Sewer - Industrial waste continues to discharge into the Passaic River, despite the concrete dam built by the City to keep the sanitary sewer from overflowing into the storm sewer. On December 30 and 31, 1970, the City attempted to walk and photograph a part of this sewer to determine the source of pollution, with negative results. Mr. Altiero stated the sewer must be cleaned before they could reattempt to locate the source of pollution. He also reported that plans and estimates have been completed for the cleaning of the Roanoke Avenue Sewer between Doremus Avenue and the chamber between Doremus Avenue and Avenue P. In a letter dated August 31, Mr. Van Riper stated that he hoped for an award of a contract on September 1, 1971. During October, Mr. Van Riper stated that the work was awarded to Condrin Construction Co., and work would begin in November. General Sewer Cleaning Company of Long Branch, New Jersey, a sub-contractor for Condrin, began cleaning this sewer on November 8, 1971. Sewer cleaning operations continued through November and the early part of December.

Violations - City of Newark (continued)Roanoke Avenue Storm Sewer (continued)

On December 9 at approximately 9:30 A.M., the General Sewer Cleaning Company was preparing to put a TV camera into the sewer when an explosion occurred injuring three men. The explosion was located in the manhole on the Pitt-Consul Chemical Company property.

Mr. Altiero reported to Inspector McLaughlin that further sampling would be done by the City with analyses performed by Edel Laboratories before allowing anyone else to enter the sewer. The December 14 sample showed a C.O.D. of 1051.

Violation - Newark Paraffine Paper Company, 70 Blanchard Street, Newark, N. J.

December 14 - 31, 1972

(J. McLaughlin)

One of the pollutions uncovered by Messrs. T. Cassera and Mr. A. Reitano (see Special Report No. 12, page 47), was from Newark Paraffine Paper Company.

The sample taken by Mr. J. McLaughlin and Mr. W. Fleming on December 14 was polluting. Mr. Lubetkin wrote to this company on December 20, directing them to halt this pollution at once and to inform the Commissioners what is being done to halt the pollution.

On January 4, 1972, Mr. A. A. Coraci, Secretary-Treasurer of this company, wrote that the matter has been taken up with the Mogul Corporation, their water treatment people, and have been assured of an early response.

As of the end of the year, the pollution continued.

Violation - City of Orange, Washington Street Storm Sewer Intermittent

(R. Goldstein)

This is an intermittent violation. E. T. Killam Associates, in a report dated September, 1962, had originally recommended a complete rebuilding of this sewer to eliminate the pollution, but the cost was considered too high by the City. In 1965 the Commissioners took legal action against the City of Orange to halt the pollution.

The City did not build the new system needed but, as a result of the legal action, they plugged openings and repaired cracks to halt the pollution. They also installed a chlorination station, which went into operation May 15, 1966, to disinfect that sewage which they were unable to prevent from leaching into the system.

Violation-City of Orange (continued)Washington Street Storm Sewer (continued)

For a period of time, samples were satisfactory, then samples were intermittently bad, as plugs fell out and cracks opened. Repairs are made as needed.

On March 9, 1971, the City informed the Commissioners that they were in the process of trying to obtain Federal and State assistance to improve the City's sanitary sewerage system. On March 22, Mr. Lubetkin wrote to the City stating that the Commissioners hope that the work for which assistance is being sought will include the rebuilding of the Washington Street Storm Sewer.

On April 26, 1971, Mr. Lubetkin wrote to Mr. DeCarlo, City Engineer, informing him of the problem and asking what program the City of Orange would institute to abate the pollution completely. A letter dated October 22, from the E. T. Killam Associates to the Commissioners explained that the City had made application to HUD for major improvements to the sewer system and have had many meetings on this matter with HUD and the Environmental Protection Agency. The letter stated that the City wishes to proceed with this project but was unable to do so until financial assistance can be obtained from the Federal or State Government.

On November 4, 1961, Mr. Lubetkin wrote to the New Jersey Department of Environmental Protection to determine the status of the City of Orange and received a reply dated November 17, that the Department of Environmental Protection does not have information on progress of HUD's review. On November 19, Mr. Lubetkin wrote to HUD requesting the status of the City's application. As of the end of the year, no reply had been received, however on December 16, Mr. De Carlo wrote to the Commissioners that they have had meetings with HUD and received a project number (not given to the Commissioners) which makes them optimistic.

Of 53 samples taken of this discharge in 1971, 26 were unsatisfactory.

Violation-Otis Elevator Company, 1000 First Street, Harrison, New Jersey.

December 14-31, 1971

(J. Colello)

One of the pollutions uncovered by Mr. T. Cassera and Mr. A. Reitano (See Special Report No. 12) was from the Otis Elevator Company.

Samples were taken December 14, by Mr. J. Colello and Mr. Cuccinello from the five outlets that were flowing (outlets number 7,8,10,15 and 16 on the Commissioners' outlet chart).

Violation-Otis Elevator Company, (continued)

The discharge from outlet #7 was polluting having a pH of 11.3, a turbidity of 420 and a C. O. D. of 129 mg/l.

On December 20, Mr. Lubetkin wrote to this company directing them to halt this pollution at once and requesting that they inform the Commissioners what they will do to halt the pollution.

As of the end of 1971, no reply has been received from this company, however the Inspector informed Mr. Lubetkin that the company is making plans to divert the polluting flow from the river to the sanitary sewer.

Violations - Podell Industries, 296 Midland Avenue, Garfield, New Jersey.

June 28, 1971

(J. Perrapato)

Mr. B. Hudak, Bergen County Park Commission Foreman, notified Inspector J. Perrapato at 9:30 A. M. on June 28 of an oily flow from Schroeder's Brook to Dahnert Lake. Checking back, Inspector Perrapato discovered that the oil was coming from a discharge of recirculating water at Schroeder's Brook. Cleaning of their oil separator halted this pollution. The oil overflow was halted at about 11:00 A. M. the same day.

December 22-31, 1971

(F. Cupo and J. Perrapato)

Mr. J. Bentie, Public Works' Commissioner of Garfield called Inspector F. Cupo at 6:15 A. M. on December 22, and told him that Schroeder's Brook was running a deep green.

At 6:30 A. M., Mr. Cupo met with Mr. Bentie and traced the the pollution to Podell Industries Inc.

The storm pit, which flows into Schroeder's Brook, had a blue material in it. This was pointed out to Mr. Gerson, manager of the plant. He was directed to halt the pollution immediately.

At 9:35 A. M., Mr. Cupo returned to this plant with Mr. L. Cuccinello and Mr. W. Fleming and spoke to Mr. Podell. Mr. Podell informed them that the violation had occurred during the night and as soon as he found out what happened, he would inform the Commissioners, meanwhile the pit was being cleaned.

Later the inspectors were informed that the night crew had cleaned screens into the pit and that the sanitary line was blocked, causing the water to back-up into the Brook. A Roto Rooter company was called to clean out the sanitary line, thus this particular pollution was halted by December 23.

Podell Industries- (continued)

Mr. Lubetkin wrote to this company on December 27, 1971, informing them of this pollution and pointing out similar problems in 1968, 69 and 70.

Mr. Lubetkin requested a reply informing the Commissioners what Podell would do to prevent a repetition of this type of pollution again. Mr. Lubetkin warned them that in the event that satisfactory precautions cannot be instituted by Podell, it would be necessary for the Commissioners to take further action.

Mr. Bentine again called at 8:00 A. M. on December 28, that the Brook was colored. Inspector J. Perrapato and F. Cupo again traced this to Podell. It came from a spillage by a night worker which flooded an outside pit and then ran to Schroeder's Brook.

Mr. Podell told Mr. Perrapato that they were discussing possible means of tying any overflow into the sanitary sewer and they wished for time to study the problem at which time they would write to the Commissioners about their plan.

As of the end of 1971, no letter had been received and this will be carried as an active violation until such time as a solution to the problem is found.

(Mr. Bentine reported color in the Brook again on Sunday, January 2, in the morning but it was clear by the time the inspector arrived).

Violation-Scheps Cheese Corp., 168 East Main Street,
Prospect Park, New Jersey.
December 17-31, 1971

(T. Costello)

On November 26, 1971, an anonymous letter was sent to Mr. Richard Sullivan, Commissioner of Department of Environmental Protection (received December 6, 1971) complaining about the Scheps Cheese Co., dumping residue of cheese manufacturing into the river. A copy of this letter was sent to Mr. Lubetkin on December 13 (received December 17) and Mr. Lubetkin assigned Inspector T. Costello to investigate and report.

Mr. Costello reported that a cracked sanitary sewer let sewage seep into the boiler blow-down pit with resultant discharge of floor washings of industrial waste products to the Passaic River.

Mr. Ben Scheps was directed to halt the pollution. He stated he has contacted a plumber and expects to make the repair after January 1, 1972.

Violation-Standard Tallow Company, 61 Blanchard Street,
Newark, New Jersey.
Intermittent Oct. 7 to Dec. 31, 1971 (J. McLaughlin)

The Standard Tallow Company's yard is adjacent to a Central Railroad track. The yard area is covered with decaying tallow waste products, and leaky condensate steam pipes discharge sufficient hot water so there is an intermittent flow to the Central Railroad track area. During rainfall this material is washed into a catch basin in Blanchard Street and reaches the Passaic River via the storm sewer. Samples analyzed were highly polluting with a high pH and were also flammable.

Inspector J. McLaughlin contacted Mr. R. Levy, partner of the company, and brought the matter to his attention. Toward the end of October, a layer of sand approximately 4" had been spread over the yard area covering the tallow waste and oil but nothing had been done to halt the flow of polluting liquid toward the railroad tracks.

On November 4, 1971, Mr. Lubetkin wrote to this company informing them of the violation and directing they cease pollution immediately. Mr. Levy replied on November 5, stating that they had stopped polluting by temporarily connecting pipes to sewer system via a cooling pit. He also said that they were in the process of building a new plant (to be in operation by the middle of December), which would be a permanent solution to the pollution.

Since the inspector's reports still indicated pollution coming from this source, Mr. Lubetkin again wrote to this company on November 19, informing Mr. Levy that despite his previous letter, pollution continued. Mr. Lubetkin requested a reply to his letter after Mr. McLaughlin visited the plant and pointed out the problem.

On December 1, Mr. Levy replied that they expected their current plant to close January 3, and a new plant to be running by the middle of February, 1972. He explained that the last pollution was due to a major breakdown when two valves broke, allowing the boiler returns to escape. He stated this was repaired November 26.

Mr. Levy stated that when the new plant is completed they will have no further problem.

Inspector McLaughlin reports construction proceeding with periodic flows to ground. This will be kept on active list until all possible pollution ceased.